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## ABSTRACT

This study about rural school and student characteristics uses recent investigations to focus on the needs of rural schools and students. The first two sections of the report describe rural populations and communities, paying particular attention to changes since 1970 and to regional differences in growth rate, economic base, and racial/ethnic composition. Using national figures supplemented with regional or local data, Section III examines the "conventional wisdom" assumptions that the 50-year trend to consolidate schools is abating. Section IV focuses on the lag of the nonmetropolitan population as a whole, and all racial and ethnic groups in particular, behind the metropolitan population on measures of college attainment, high school attainment, and literacy rates during the 1970s. Section V reports how high school seniors answered questions about their classes, teachers, and schools in the 1981 "High School and Beyond" study. A final summary and conclusion section suggests a need for educators and policy makers to consider three elements of education as it occurs in the nation's rural schools: equity, curriculum, and planning around regional differences within a national context. (NEC)

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THE EDUCATION OF RURAL STUDENTS  
IN THE UNITED STATES

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Submitted by: Gail Armstrong Parks

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## INTRODUCTION AND OVERVIEW

For about half a century, the education of rural Americans has not received attention proportionate to the numbers. Today rural elementary and secondary students make up almost a third of the total student population, and the overwhelming majority of school districts are rural. Yet compared with urban and suburban students and schools, the rural counterparts have been little publicized. The lack of attention to rural populations in national data collection efforts has made it especially difficult for interested researchers to say accurate things about the condition of rural education, with the result that much of the published work on this topic is in the form of state or local studies. These are, of course, interesting and useful; but they do not convey the national picture or tell us anything about rural differences among regions.

Quite recently, however, several national studies of education have either included a rural variable or focused on rural students and schools. These are the studies from which, along with Census of Population reports, most of the data for this report have been derived. The National Assessment of Educational Progress (NAEP) data on student achievement, the High School and Beyond data on 1980 high school seniors, and Frank Fratoe's reports on the education of nonmetro minorities are the basis for much of that part of this report dealing with the educational characteristics of rural Americans. The National Center on Education Statistics (NCES) has provided data on the universe of schools -- including rural ones -- in 1981-82, thus making it possible to report on the distribution of schools by region and metropolitan status.

The bulk of this study is about rural school and student characteristics. In general, rural students do not match either the attainment or achievement of other students; but there are some striking exceptions. Their performance relative to other groups has improved in some cases since 1970, however; and they seem to be more involved with extra-curricular activities in their schools than are other students. Rural seniors report less enrollment in advanced academic classes than do other seniors, but the picture of enrollment in selected vocational classes is mixed.

There seems to be convincing evidence that region is as important for predicting school experiences as is metropolitan status or urbanicity; sometimes it seems more so. Northeastern students of all types seem generally to have more academic opportunities than other students and to do better on tests of achievement. Students in the South are generally the farthest behind on both counts. Rural minorities, however, have the most disadvantaged education status of any group.

Education does not occur in isolation but in the context of regional and community characteristics. The special features of regions and locales are usually reflected somehow in the way education is conducted and in the criteria used to judge its success. For this reason, the first two sections of this report describe rural populations and communities, paying particular attention to changes since 1970 and to regional differences in growth rate, economic base, and racial/ethnic composition. The demographic work of Calvin Beale, in particular, has

made it possible to identify the regions that face special challenges because of decline or unusually rapid growth.

Since this study does not address the question of "what has been happening lately in rural education?" a brief summary seems appropriate here: Since 1977, an encouraging amount of activity has taken place. At least sixteen colleges and universities now have rural education centers. In at least five states, there are rural education associations, and in every geographic region of the country schools have created innovative programs to solve rural problems by taking advantage of rural strengths. National organizations like People United for Rural Education (PUBE) and the Rural Education Association (REA) have gained some national attention. The National Institute of Education has directly supported four major studies of various problems in rural education and indirectly supported many rural projects in labs and centers. The Department of Education has provided most of the funding for two national seminars on rural education, one in 1979 and one in 1982. In the recent past, the Department of Agriculture helped support a national seminar and conducted several studies of its own on the topic of rural education.

Rural schools and students deserve this attention after so long a period of relative neglect. As this study shows, many of their needs are not being met, given attainment and achievement as criteria. If students in rural places are to achieve equity with other students, cooperative efforts among communities, states, and national agencies may well be mandatory.

## I. THE RURAL POPULATION

### Definition of Rural and Nonmetro

Most data used in this study are based on the census definition in most frequent use: places outside a Standard Metropolitan Statistical Area (SMSA), which is a county or group of contiguous counties containing at least one city with 50,000 or more people. This is not everyone's -- or every agency's -- definition. The Census also has a rural category, which refers to places with fewer than 2,500 people plus open countryside as not urban and therefore rural. Some agencies classify as rural any place with fewer than 10,000 people. The National Assessment of Educational Progress (NAEP) uses a fewer than 8,000 category to define "small places." For schools that consider themselves rural or small, these definitions are more than academic concerns; for it is widely contended by rural and small educators that their needs and problems are sometimes unique and require solutions tailored to the realities of rural settings.

The problem does not end with the question of numbers but also has a qualitative dimension. One might ask, "What are the characteristics of a rural place?" There are no simple answers, the best one perhaps being that it depends -- largely on where the rural community is located. Several schemes for classifying rural communities have been advanced and will be discussed later. First, however, a quantitative description of the rural population is appropriate.

## Nonmetro Growth Between 1970 and 1980

In 1980, 63 million people lived in rural America, up from 54 million in 1970. During that time, metropolitan population grew from 149 million to 164 million. This means that rural counties grew by 15.8 percent, while urban counties grew at a rate of only 9.8 percent. Growth at a rate of at least 14% occurred, moreover, in both types of non-adjacent rural counties. (See table I-2, page 7).

A U.S. Department of Agriculture demographer has remarked that one of the "surprises" of demographic change between 1970-1980 was the growth of rural and small town population:

If ever a piece of conventional wisdom existed about the dynamics of population movement in 20th century America, it was that population flowed from rural to urban areas. . . . Neither the demographic forecasting at the beginning of the 1970s nor the public and academic discussions of the time gave any hint of an imminent reversal in the traditional migration pattern.

In the past decade, forty-eight states either increased their rate of nonmetro growth or saw a decrease in the rate of decline. At this time, 17 states are predominantly nonmetro and four others come very close.

Using the urban and rural definitions to look at the states, one is presented a rather different picture. In 1980 there were 59,539 thousand rural people, meaning that 26 percent of the population was rural. In that year, seven states were between 51 and 66 percent rural and ten others were between 40 and 49% rural. Twenty-five states were at least one-third rural, whereas only thirteen were less than 20 percent rural.

Table I-1

States Ranked by Percent Rural Population, 1980

State	# Urban	# Rural	% Rural
1. Vermont	173	339	66.2
2. West Virginia	705	1,244	63.8
3. South Dakota	320	370	53.6
4. Mississippi	1,193	1,328	52.7
5. Maine	534	591	52.5
6. North Carolina	2,819	3,056	52.0
7. North Dakota	318	334	51.2
8. Kentucky	1,859	1,802	49.2
9. Arkansas	1,179	1,106	48.4
10. New Hampshire	480	440	47.8
11. Montana	416	370	47.1
11. Idaho	510	434	47.1
13. South Carolina	1,686	1,433	45.9
14. Virginia	3,529	1,817	44.0
15. Iowa	1,708	1,206	41.4
16. Alabama	2,333	1,557	40.0
17. Tennessee	2,773	1,818	39.6
18. Georgia	3,406	2,058	37.7
19. Nebraska	984	586	37.3
20. Wyoming	296	175	37.2
21. Indiana	3,525	1,966	35.8
22. Alaska	258	142	35.5
23. Kansas	1,576	787	33.3
24. Minnesota	2,725	1,352	33.2
25. Oklahoma	2,035	990	32.7
26. Oregon	1,788	845	32.1
27. Missouri	3,351	1,567	31.9
28. Louisiana	2,886	1,318	31.4
29. Pennsylvania	8,221	3,645	30.7
30. Michigan	6,548	2,711	29.3
30. Delaware	421	175	29.3
32. New Mexico	939	361	27.8
33. Ohio	7,916	2,888	25.7
33. Wisconsin	3,020	1,685	25.8
35. Connecticut	2,450	658	21.2
36. Texas	11,327	2,901	20.4
37. Maryland	3,386	830	19.7
37. Colorado	2,329	560	19.4
39. Illinois	9,475	1,944	17.0
40. Washington	3,038	1,092	16.4
41. Arizona	2,278	440	16.2
42. Massachusetts	4,808	929	16.2
43. Florida	8,208	1,532	15.7
44. Utah	1,233	222	15.6
45. New York	14,857	2,700	15.4
46. Nevada	682	118	14.7
47. Hawaii	835	130	13.5
48. Rhode Island	824	123	13.0
49. New Jersey	6,557	807	11.0
50. California	21,611	2,058	8.7



The largest numbers of people, however, were concentrated in some of the nations most urban states. One-third of all rural people lived in eight states that were less than one-third rural: California, New York, Texas, Florida, Illinois, Wisconsin, Ohio, and Pennsylvania. California is the nation's most urban state but it has the sixth largest rural population in the United States.

On the other hand, the nations eight most rural state's -- none of which is less than 49 percent rural -- contain only 16 percent of the total U.S. population. Nine of the twenty most rural states have fewer than 600,000 rural inhabitants in each state.

Nonmetropolitan growth in different geographic regions varied enormously during the decade. A second demographic surprise, according to Calvin Beale, was the shift in population to the West and South. A historical landmark was established when 1980 Census data showed that more than one-half the U.S. population -- for the first time ever -- lived in the West and South. Nonmetro populations grew by 32 percent in the West and by almost 18 percent in the South; but the South's metropolitan growth was 21 percent, marking it as the one region whose urban population grew at a faster rate than its rural population. The South remains, however, the nation's most nonmetro region with 33.1 percent of its population so classified. In 1980, 16 percent of the population in the West was rural, 30.7 percent in the Northeast, and 29.5 percent in the North Central region.

Figure 1

Calvin T. ...  
...

The growth has been uneven in yet another sense. Whereas \_\_\_\_\_ nonmetro counties grew during the decade, about 485 declined. Declines were most severe in the Great Plains and Western Corn Belt, which lost farm population, and in the Mississippi Delta, which continued to lose rural Blacks. In agricultural sections of the South, rural exodus was heaviest during the 1960s but continued at a reduced rate during the 1970s.

Some of the fastest growing areas were resort and retirement communities (e.g., the Florida peninsula and the Ozark - Ouachita Uplands) and mining areas in the South and West, including the Appalachian coal fields. (Figure 1 shows how the four major U.S. regions varied by recent population growth experience.) It must be emphasized, however, that significant rural turnaround was not limited to recreation, resort, and mining development but occurred throughout the states in many types of communities, largely as an expression of people "voting with their feet" in favor of perceived rural and small town amenities -- even in the absence of pecuniary advancement.

### The Farm Population

The farming population has continued to decline, however, as more farms were consolidated between 1970 and 1978 and agriculture grew even less labor intensive than it was a decade ago. In 1978 the farm

Table I-2

## Metro and Nonmetro Population Changes, 1970-1980

(in thousand)

1980

	<u>Total</u>	<u>Nonmetro</u>	% change since 1970	<u>Metro</u>	% change since 1970
NE	49,011	7,397	12.4	41,614	-2.0
N. Central	58,602	18,850	7.3	39,752	1.6
South	74,734	27,466	17.1	47,268	20.1
West	42,952	9,092	31.8	33,859	21.2

Table C. Farm and Nonfarm Population, by Age and Sex: 1978

(Numbers in thousands. Five-quarter averages centered on April. For meaning of symbols, see text)

Age	Farm			Nonfarm			Percent distribution					
							Farm			Nonfarm		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
<b>CURRENT DEFINITION</b>												
All ages.....	6,501	3,396	3,105	206,966	99,606	107,360	100.0	100.0	100.0	100.0	100.0	100.0
Under 20 years.....	2,218	1,160	1,058	69,281	35,089	34,194	34.1	34.2	34.1	33.5	35.2	33.1
20 to 34 years.....	1,109	598	510	51,069	24,679	26,392	17.1	17.6	16.4	24.7	24.8	24.6
35 to 64 years.....	2,405	1,234	1,169	64,704	30,891	33,814	37.0	36.3	37.6	31.3	31.0	31.6
65 years and over.....	771	402	368	21,909	8,950	12,960	11.9	11.8	11.9	10.6	9.0	12.1
Median age.....	33.8	33.0	34.5	29.5	28.4	30.6	...	...	...	...	...	...
<b>PREVIOUS DEFINITION</b>												
All ages.....	8,005	4,145	3,860	205,462	98,857	106,605	100.0	100.0	100.0	100.0	100.0	100.0
Under 20 years.....	2,692	1,409	1,283	68,807	34,840	33,969	33.6	34.0	33.2	33.5	35.2	31.9
20 to 34 years.....	1,325	703	621	50,853	24,574	26,281	16.6	17.0	16.1	24.8	24.9	24.7
35 to 64 years.....	2,975	1,515	1,459	64,136	30,610	33,524	37.2	36.6	37.8	31.2	31.0	31.4
65 years and over.....	1,014	518	495	21,666	8,834	12,833	12.7	12.5	12.8	10.5	8.9	11.9
Median age.....	34.8	33.9	35.4	29.4	28.4	30.5	...	...	...	...	...	...

Table D. Employment Status of the Farm and Nonfarm Population 14 Years Old and Over, by Sex: 1978

(Numbers in thousands. Figures are five-quarter averages centered on April)

Sex and employment status	Current definition		Previous definition	
	Farm	Nonfarm	Farm	Nonfarm
Both sexes.....	5,186	161,421	6,419	160,189
In labor force.....	3,273	98,417	3,966	97,724
Percent of total.....	63.1	61.0	61.8	61.0
Employed.....	3,199	92,002	3,861	91,341
Unemployed.....	73	6,414	105	6,383
Percent of labor force.....	2.2	6.5	2.6	6.5
Not in labor force.....	1,913	63,004	2,453	62,465
Male.....	2,715	76,377	3,328	75,764
In labor force.....	2,211	57,187	2,645	56,753
Percent of total.....	81.4	74.9	79.5	74.9
Employed.....	2,179	53,903	2,596	53,486
Unemployed.....	32	3,284	49	3,267
Percent of labor force.....	1.4	5.7	1.9	5.8
Not in labor force.....	504	19,190	683	19,011
Female.....	2,472	85,044	3,091	84,425
In labor force.....	1,061	41,229	1,321	40,970
Percent of total.....	42.9	48.5	42.7	48.5
Employed.....	1,020	38,099	1,265	37,854
Unemployed.....	41	3,131	56	3,116
Percent of labor force.....	3.9	7.6	4.2	7.6
Not in labor force.....	1,411	43,815	1,770	43,455

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population was 3.7 percent, compared with 4.4 percent in 1974 and 4.8 percent in 1970.<sup>3</sup> Thus the pattern of more than half a century has continued, with the result that the men and women who produce the nations food and fiber products are among the smallest of minority groups. In 1920, thirty percent of Americans lived on farms.

Compared with total U.S. population, the farm population has disproportionate numbers of the middle aged, elderly persons, and males; and it has a low proportion of young adults -- those persons aged twenty to thirty-four who are less likely than other age groups to receive transfer payments and more likely to be employed full time. The farm population thus is older (median age: 33.8 in 1978) than the total U.S. population (median age: 29.5 in 1978) These differences are shown in more detail in Table I-3.

### Rural Minorities

Most nonmetro minorities in the U.S. live in the Southeast, where the minority population is mainly Black, and in the Southwest, where it is mainly Hispanic. In 1979, nonmetro Blacks made up only 8.2 percent of the total nonmetro population, but were \_\_\_\_\_ percent of the population in the southeast; about 90 percent of rural blacks live in the south.<sup>5</sup> The Southern Coastal Plain has much of this population and experienced substantial population decline between 1940 and 1970:

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*Table I-4*

**Table B. Farm and Nonfarm Population, by Race and Spanish Origin: 1978**

(Numbers in thousands. Figures are five-quarter averages centered on April)

Race	Total	Farm	Nonfarm	Percent distribution		
				Total	Farm	Nonfarm
CURRENT DEFINITION						
All races.....	1213,467	6,501	206,966	100.0	100.0	100.0
White.....	184,806	6,064	178,742	86.6	93.3	86.4
Black.....	24,757	349	24,408	11.6	5.4	11.8
Spanish origin <sup>2</sup> .....	11,791	90	11,701	5.5	1.4	5.7
PREVIOUS DEFINITION						
All races.....	1213,467	8,005	205,462	100.0	100.0	100.0
White.....	184,806	7,482	177,324	86.6	93.5	86.3
Black.....	24,757	416	24,341	11.6	5.2	11.8
Spanish origin.....	11,791	109	11,682	5.5	1.4	5.7

<sup>1</sup>The total U.S. population figure here differs from that shown in table A because the latter refers to the total resident population, whereas this and other tables refer to the civilian noninstitutional population.

<sup>2</sup>Persons of Spanish origin may be of any race.

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*Table I-5*

**Table 1. Farm Population, by Race and Spanish Origin and Sex, for Broad Age Groups: 1978**

(Current farm definition. Numbers in thousands. Figures are five-quarter averages centered on April)

Race and age	Both sexes	Male	Female	Percent distribution		
				Both sexes	Male	Female
All races.....	6,501	3,396	3,105	100.0	100.0	100.0
Under 14 years.....	1,315	681	634	20.2	20.1	20.4
14 years and over.....	5,186	2,715	2,472	79.8	79.9	79.6
White.....	6,064	3,165	2,899	100.0	100.0	100.0
Under 14 years.....	1,198	624	574	19.8	19.7	19.8
14 years and over.....	4,866	2,541	2,325	80.2	80.3	80.2
Black.....	349	186	163	100.0	100.0	100.0
Under 14 years.....	98	46	52	28.1	24.7	31.9
14 years and over.....	252	140	112	72.2	75.3	68.1
Spanish origin <sup>1</sup> .....	90	53	37	100.0	(B)	(B)
Under 14 years.....	26	15	11	28.9	(B)	(B)
14 years and over.....	64	38	26	71.1	(B)	(B)

<sup>1</sup>Persons of Spanish origin may be of any race.

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In the three decades from 1940 to 1970, a vast outpouring of people from this region took place as agriculture was mechanized and blacks went to the North. In the 1950s alone, a net of 1.7 million people left the nonmetro counties, a majority of them black. Despite the disproportionate out-movement of blacks, a majority of Southern Coastal Plain counties still had thirty percent or more blacks in their total population in 1970, and in eighty-seven counties better than 50 percent of the people were black. (Brown and Beale,

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Diversity: p. 57). Today, there is a balance between out-movement and in-movement within the region. Ten percent or less of nonmetro blacks, however, are directly involved with

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agriculture (Brown and Beale, p. 53)

The Rio Grande Valley and other parts of the Southwest -- Arizona, New Mexico, and the Rio Grande portion of Colorado and Texas - had a population that was forty percent of Mexican-American origin in 1970. In that year, the California Central Valley nonmetro population was about one-sixth Mexican American. Brown and Beale have remarked on the difficulty of estimating how rapidly the rural Hispanic population may be growing because of inconsistent reporting methods. They note, however, that "birthrates are high and reinforcement through immigration

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continues."

In the Four Corners Region and the Northern Great Plains, American Indians are the dominant minority group. Alaska has both Indians and Eskimos as substantial minority groups. In 19\_\_\_\_, more than fifty percent of Indians lived in nonmetro areas.

In 1978, only a small fraction of Blacks and Hispanics were farmers or farm workers. Only 5.4 percent of the farm population was Black, compared to almost twelve percent of the nonfarm population. Hispanics

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made up an even smaller proportion of the farm population -- 1.4 percent -- and the non-farm population - 5.7 percent. Data on American Indians were not available (See tables I-4 and I-5).

### Significance of Population Change for Rural Education

For rural educators and the communities they serve, what does it mean that some nonmetro communities are growing at a rapid rate, others are growing moderately, and a minority of them are declining? Analysts of population change have noted that different types of changes require different approaches to long-term planning -- but that planning is a necessity in every instance. Calvin Beale has predicted that, although the nation will probably remain predominantly urban, at least moderate non-metropolitan growth is likely to continue throughout the 1980s. For rapid-growth areas, the greatest challenge will be providing services to meet the needs of an expanding population in time to prevent social disarray. But for declining communities, the task will be harder as local officials must choose among competing legitimate claims in an era of shrunken resources. Local development schemes that are linked to education may be mandatory for survival; and federal aid may be needed for severely depressed areas.

In addition, the population turnaround means that two long standing concerns will assume added significance. First is "the difficulty of providing a focus for rural issues." There are more than 13,000 nonmetropolitan towns and thousands of rural neighborhoods. But they are

both dispersed and diverse in their needs and characteristics. Providing a unified voice for rural places that vary enormously in needs and characteristics may be, as Beale notes, one of the great rural challenges of the decade."

The second long-standing problem is undercounting in the Census of Population and Housing:

The states in which the estimated undercount was most severe in 1970 were primarily rural and small-scale metropolitan states, rather than the states from which most of the recent concern has come . . . . But national awareness has been drawn to (central city undercounting) because of the attention that full-time professionals in urban governments and public

interest organizations could give to it. (Beale, R.D., p.6)<sup>9</sup>

Demographic change has brought a new social reality into the countryside, one that must be taken into account if rural students are to get the best education possible. Both rural and urban places have taken on some of each other's characteristics in the past decade:

There is a more thorough penetration of rural life by amenities, industries, businesses, institutions, communications, programs, laws, styles, family structure, social ills, and stresses and strains that were once regarded as basically urban in nature . . . . The rise of country music, charismatic religion, and rural-based forms of outdoor recreation represent a penetration of urban life by essentially rural values. (Beale, RDIP; p.p.

<sup>10</sup>  
3-4).

It is probably futile to debate whether a degree of urbanization in the countryside is good or bad, for the trend is unlikely to change -- and may well represent a "maturing" characteristic of American society as it begins to integrate rural and urban values into both cities and the

countryside. If students are to be taught the flexibility needed for living in both kinds of places, the change in communities may be a positive opening of ways for schools to harness the energy generated by the mixing of rural and urban populations.

## II. REGIONAL DIFFERENCES AND TYPES OF RURAL COMMUNITIES

In education policy for nonmetropolitan populations, a persistent question is: What approaches are most effective and most efficient? The question would be easier to answer if most rural communities were similar. They are not. In fact, differences among rural places are at least as great as those between rural and urban places. They are probably greater, because the vast spectrum of U.S. cultural, ethnic, and racial variation is reflected in the U.S. countryside. Rural communities differ in their cultural and ethnic compositions, degree of sparsity and economic bases.

To get a handle on this diversity, a number of researchers have proposed schemes for classifying rural communities. Paul Nachtigal, for example, has proposed that for public policy purposes, three categories might be used: The Rural Poor, illustrated by Appalachian coal towns and delta communities of the lower Mississippi; Traditional Middle America, illustrated by Midwest and Northern Great Plains farm communities; and Communities in Transition, illustrated by Florida recreation development and western energy - development communities.<sup>1</sup> Tom Gjelten has suggested a refinement of this scheme in which five rural community types are identifiable: stable (mostly white, homogenous, and agricultural); depressed (underdeveloped economies, with large numbers of minorities); high growth (with great needs for planning and management); reborn (scenic, large in-migration, with native vs. newcomer conflicts); and isolated (lacking in funds for education and in contact with the outside

Degree of sparsity as a feature of rural places suggests the need for different education strategies to meet different needs. (Table II-1 ranks the states from least to most population by square mile.) Fourteen states have fewer than twenty persons per square mile. While only two of these states are among the most rural (by the non-urban definition), their nonmetropolitan populations tend to be small and scattered. In recognition of this population characteristic, several of these states have created service delivery strategies or sparsity factors in their school finance formulas .

Similarly, new England states that are predominantly rural appear to have paid attention to the unique educational needs of sparsely settled areas (Getz and Hoppe).<sup>3</sup> The remaining regions are a mixed picture, with the South as a whole perhaps least characterized by special provisions for rural schools. (Arkansas is an exception; it is the ninth most rural state in the nation and has the greatest number of small schools of all Southeastern states.)<sup>4</sup> The South also has, of all the regions, the weakest tradition of support for public education and social services, along with the greatest number of rural Blacks and the most rural poverty (Getz and Hoppe).

Changing demographic, economic, and social realities require both constant alertness and the capacity to plan for and manage change. Today this ability, called capacity-building, has received considerable attention from federal agencies and private associations not directly concerned with education. Yet capacity-building skills are badly needed

among rural education's leaders at all levels if rural schools are to meet the challenges of a rapidly-changing society. This becomes apparent when one examines national and regional employment trends of the past decade and then looks at regional patterns of development.

### Nonmetro Employment Trends and Economic Growth

One of the most striking facts about rural economics is the change in the nature of employment. Between 1969 and 1979, nonmetro employment grew at a greater rate than metro employment. The difference was more pronounced, however, in the first business cycle (1969-1973). In the second cycle (1973-79), the nonmetro-metro difference had narrowed to .3 percent. During the 1970s, 1.6 million nonfarm jobs, on the average, were created each year, but with substantial variation among regions and counties. (See table \_\_\_\_\_, Bluestone, p.2). The West led the way, with an average growth rate of 3.5 percent. The South was next, with 2.8 percent, followed by the North Central (1.5 percent) and the Northeast (0.6 percent). Throughout the nation, the general trend was movement of employment from larger to smaller population centers. Nonmetro growth was greatest (3.4 and 3.3 percent) in counties classified as "totally rural" and least (2.1 percent for both cycles) in counties classified as "urbanized adjacent." (See table \_\_\_\_\_ (p.4 Bluestone).

Regionally and by state, employment patterns varied enormously. The U.S. average was 2.1 percent. Four states (NY, PA, OH, and IL) grew at less than half the U.S. average, while ten others (ME, MA, RI, CT, NJ,

(2)

DE, MD, MI, IN, and NC) were somewhat below it. Highest rates of employment growth were in five non-Pacific Western states (NV, AZ, UT, CO, WY, and ID) and in Florida. (See figure II-1) on p. 25).

Service producing industries dominated the growth, capturing 88.2 percent. Two categories of employment -- wholesale and retail trade and services -- accounted for more than three-fifths of the 1.8 million jobs produced annually. The rate of growth was highest for agricultural services (6.0 percent); mining (4.4 percent); services (3.5 percent) and finance, insurance, and real estate (3.4 percent). Agricultural services and mining, more important in nonmetro than metro areas, reflected some of the shift in industrial structure. In addition, manufacturing employment increased much more in nonmetro than in metro counties during the seventies, as did construction employment. Goods - producing industries, particularly manufacturing, were dispersing and decentralizing, with resulting benefits to nonmetro counties.

These trends notwithstanding, the fact remains that information- and service-producing jobs have had the greatest growth rates for at least a decade. This shift reflects the nation's emerging transformation from an industrial to a post-industrial society; a late seventies focus on energy development, which helped the West and generated jobs in services needed as a result of growth; and the aging of the population, with retired and elderly persons moving from the North to resort and recreation areas in the South and West.

The old industrial North has suffered most from employment changes and continues to endure the most severe decline in employment. The non-Pacific West has had to confront problems associated with rapid growth and with "boom and bust" occurrences in rural areas subjected to energy development gear-ups and pull-outs. In the South, "all of Dixies growth has been catch up. There is still not one southern state\* with a per capita income that matches the United States average..."<sup>6</sup>

New England and the western coastal strip that includes Washington, Oregon, and Northern California are becoming centers of high technology and debates on environmental and energy issues. Populations here are generally well educated, moderately affluent, and predominantly white. These are centers of "less is more, small is beautiful" philosophies and contain many newcomers who have elected a rural outdoor lifestyle.

### Rural Poverty

Rural poverty is unlike urban poverty in many ways. Perhaps its most distinguishing characteristic is its relative invisibility, for the rural poor are geographically dispersed and their condition lacks the visible drama of concentrated urban poverty. As one student of rural poverty has observed, it does not benefit the poor that "in many scenic rural areas, such as northern New England, the Upper Great Lakes, and Appalachia, dilapidated housing may even look quaint or picturesque." The fact is that "scenery...does not make poverty any less real."<sup>7</sup>



Like the urban poor, the rural poor lack sufficient income to provide adequate food, housing, clothing, and health care. But there are uniquely rural burdens as well. Low-population density and long distances from urban areas can put job opportunities and social services almost out of reach unless there is good public transportation. This is rarely the case in rural America.

Because policies intended to reduce poverty and its ill effects must be designed with attention to the different kinds of poverty if they are to be effective, some of the characteristics of rural poverty are described below.

In 1979, nonmetro areas had thirty-eight percent of the nation's poor but only 32 percent of its population. In 1980, 11.3 million rural people were poor, a substantial increase from the 9.4 to 10.5 million

<sup>8</sup>  
range of the 1970s. Several things account for the increase: inflation, economic downturn, and the failure of income to keep up with the inflation -- adjusted poverty income (Getz and Hoppe, pp. 283)

Almost nineteen percent of the nonmetro elderly lived in poverty in 1979, compared with eleven percent in metro areas. Poverty among rural blacks was also severe: nearly forty percent of nonmetro blacks were poor in 1979, compared with eleven percent of nonmetro whites and twenty percent of urban Blacks. Of all the nonmetro poor, almost 24 percent were Black, even though Blacks were only eight percent of the total nonmetro population. (See Table \_\_\_\_\_, Getz and Hoppe, p. 27).

Rural poverty remains concentrated in the South, which during the past decade had at least ninety percent of the persistent low-income counties (PLIs) in the nation<sup>9</sup>. In 1975, the South had 237 PLI counties, compared with 14 in the North Central region and 4 in the West. (See Table \_\_\_\_\_, Davis, p. 4 and Getz & Hoppe, Table \_\_\_\_\_, p. ) There were none in the Northeast. Between 1969 and 1975, forty-three counties lost their PLI status, largely because of earnings from agricultural and mining.

Since many (of these) counties are located in the soft coal regions of West Virginia, Virginia, and Kentucky, they were in a particular position to take advantage of the increase in soft coal prices during the early seventies.... Peanuts, soybeans and tobacco were the three largest crops in LPLI counties . . . in 1974, and price changes for the three have been somewhat volatile since 1969. If agricultural income declines, the importance of earnings from agriculture in determining low-income status may dwindle, and some PLI counties could then

<sup>10</sup>  
return to the chronic low income group.

And in contrast to some popular perceptions that poor people do not want to work, studies have shown that more than half of rural family heads worked in 1979. (See Table \_\_\_\_\_ Getz and Hoppe. p. 29) Many working people were poor because of low wages and seasonal employment. For those who did not work, illness or disability was the most common reason. Given the large conservation of elderly persons in many rural locales, this seems a logical explanation. In addition, many poor people lived in poor counties - places that had few job opportunities, little industrial development, and a low tax base. Illiteracy rates were higher in places with large concentrations of the rural poor, and education attainment is lower". In the past, businesses and industries have not

typically located in areas with a relatively uneducated work force unless strong compensating inducements are offered. One researcher has observed that such "inducements" to get new industries may make a bad situation worse because the incentive is often little or no taxes, and a need for more money to pay for increased public services arises when industries bring in more people.

### Significance for Education

Throughout the 1970s, studies consistently showed a relationship between family characteristics and educational performance: children who had educated parents with adequate incomes did better in school than poor children whose parents were not well educated. Debates about where to intervene in the poverty cycle continue, with many advocates for the rural poor favoring a "shotgun" approach that simultaneously tries to improve education, economic opportunity, and accompanying social services. An evaluation of national Title I (now Chapter I) program has shown that it benefits poor children, but there is no equivalent evaluation of a national rural economic development strategy. Several localities, however, have designed their own plans for addressing economic and educational problems.

School districts in low-income rural areas face challenges that exceed those of being in an isolated or sparsely settled area with a low tax base. Evidence to date indicates that it costs more than the average to provide educational opportunities to help poor children -- whether

rural or urban -- compete fairly with their wealthier peers. Where racial discrimination is a factor, the difficulties for students and schools are increased. It seems likely that Chapter I and other programs designed to assist disadvantaged children will continue to be needed in many rural schools for the foreseeable future. Increasingly, however, public policy is favoring local economic development strategies as a better solution for the long term. In many areas where localities have initiated the linking of education with economic development, the enthusiasm is high. For the majority of these efforts, however, it is too early to determine whether -- and to what degree -- economic development has occurred or been sustained.

14

It seems likely, however, that the trend of the 1980s will be to adopt comprehensive approaches that take local characteristics as the context for solving social problems. For educators this approach may require more cooperation with other public agencies and the private sector than has been the case to date. It may also require a broadening of the constituency for education policymaking as well.

Table II-1

States Ranked by Degree of Sparsity

AK	0.7	KV	81
WY	4.9	LA	87
MT	5.4	KY	91
NV	7.3	GA	94
SD	9.0	MI	96
ND	9.3	NH	99
ID	11	SC	101
NM	11	TN	109
UT	17	NC	113
NE	20	VA	132
AZ	24	CA	150
OR	27	HI	150
CO	28	IN	151
KT	29	FL	170
NE	34	IL	199
AR	43	OH	244
CK	44	PA	260
MN	48	DE	292
IA	52	NY	333
MS	53	MD	402
UT	54	CT	625
TX	54	MA	200
WA	61	RI	787
MO	71	NJ	947
WI	72		
AL	76		

Table 2—Compound annual rates of growth in nonfarm wage and salary employment by region, metro and nonmetro areas, 1969-79

Type of county	United States	North-east	North Central	South	West
	Percent				
All counties	2.1	0.6	1.5	2.8	3.5
Metro	1.9	.5	1.4	2.9	3.3
Greater	1.6	.2	1.1	3.2	2.9
Core	1.1	-.6	.4	2.7	2.7
Fringe	3.3	2.1	3.6	4.3	5.0
Medium	2.4	1.2	1.7	2.9	4.0
Lesser	2.5	1.5	2.0	2.6	4.4
Nonmetro	2.5	1.6	2.1	2.6	4.2
Urbanized					
Adjacent	2.1	1.5	1.6	2.3	4.2
Nonadjacent	2.5	2.1	1.7	2.4	3.8
Less urbanized					
Adjacent	2.7	1.4	2.1	2.9	4.8
Nonadjacent	2.8	1.4	2.6	2.7	4.1
Totally rural					
Adjacent	3.3	1.2	3.1	3.4	4.2
Nonadjacent	3.0	3.1	2.2	2.8	5.1

Source: Compiled from unpublished data from the Bureau of Economic Analysis, U.S. Department of Commerce.

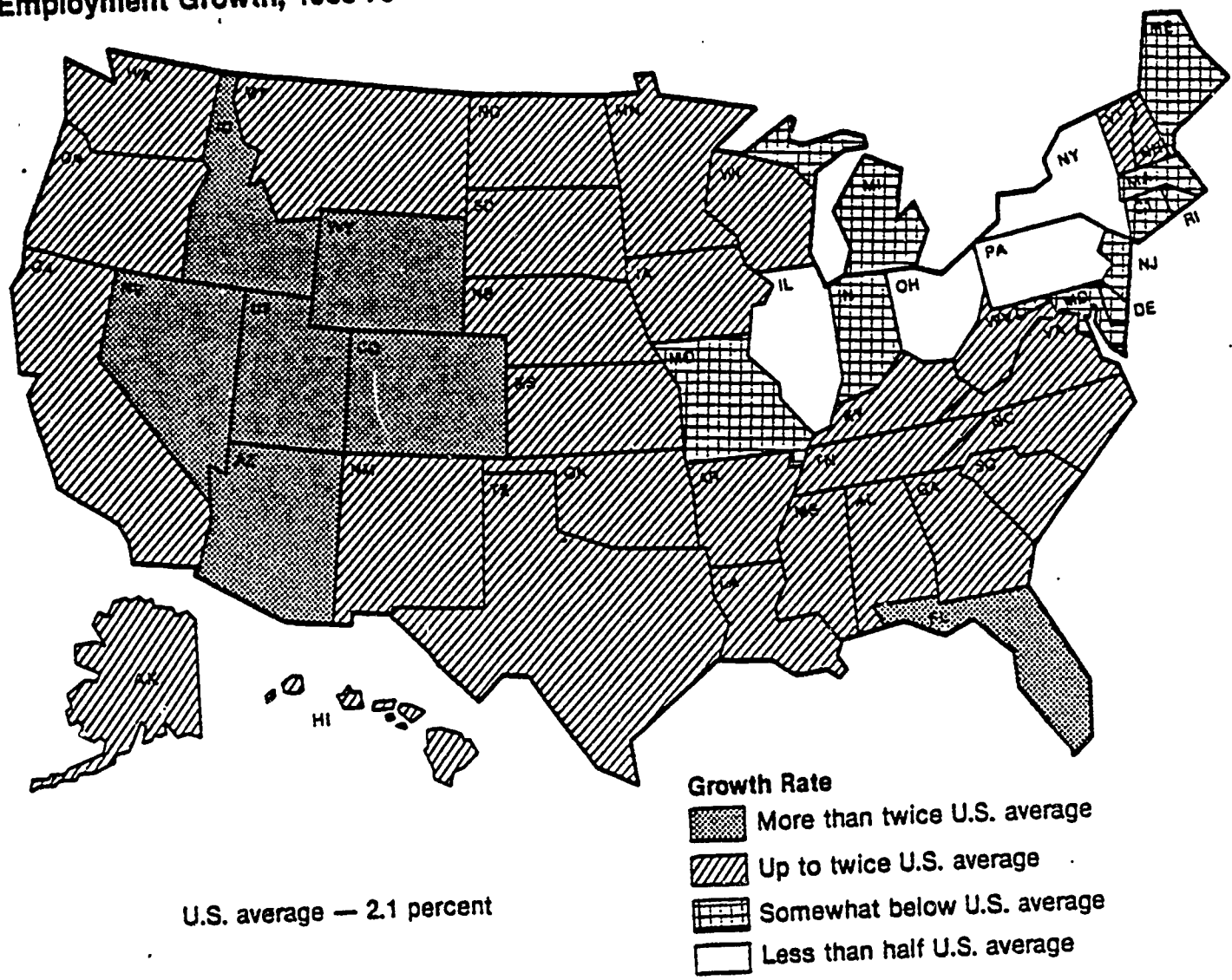
Table 3—Compound annual rates of growth in nonfarm wage and salary employment by region, metro and nonmetro areas, 1969-73 and 1973-79

Type of county	United States		Northeast		North Central		South		West
	1969-73	1973-79	1969-73	1973-79	1969-73	1973-79	1969-73	1973-79	1969-73 1
	Percent								
All counties	1.8	2.3	0.4	0.8	1.2	1.8	2.9	2.8	2.5
Metro	1.5	2.2	.3	.7	.9	1.7	3.0	2.9	2.2
Greater	1.0	2.0	-.2	.4	.6	1.5	3.3	3.1	1.6
Core	.4	1.5	-1.0	-.3	-.1	.7	2.8	2.6	1.3
Fringe	3.0	3.5	2.1	2.1	2.9	4.0	4.4	4.2	4.1
Medium	2.3	2.5	1.2	1.2	1.2	1.9	3.0	2.8	3.6
Lesser	2.2	2.7	1.4	1.6	1.9	2.0	2.2	2.8	3.9
Nonmetro	2.6	2.5	1.8	1.4	2.1	2.0	2.8	2.5	3.7
Urbanized									
Adjacent	2.1	2.1	1.8	1.4	1.7	1.5	2.0	2.5	3.9
Nonadjacent	2.3	2.6	1.9	2.3	1.2	2.0	2.6	2.2	3.2
Less urbanized									
Adjacent	2.9	2.5	1.9	1.1	2.4	1.9	3.1	2.8	4.3
Nonadjacent	2.9	2.7	1.5	1.3	2.5	2.7	3.2	2.3	3.6
Totally rural									
Adjacent	3.4	3.3	1.8	.7	3.4	2.9	3.5	3.3	3.2
Nonadjacent	3.2	2.9	3.8	2.6	2.5	2.0	3.3	2.5	4.5

Source: Compiled from unpublished data from the Bureau of Economic Analysis, U.S. Department of Commerce.

Figure II-1

Employment Growth, 1969-79\*



\*Compound annual rate of change in nonfarm wage and salary employment.

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TABLE 1.5 Population and Employment Growth Rate by Area, Selected Decades

Item and area	Percentage change							
	Actual				As a percentage of U.S. change			
	1940-50	1950-60	1960-70	1970-80	1940-50	1950-60	1960-70	1970-80
<b>Population:</b>								
South	13.3	16.5	14.3	19.0	92	89	107	176
South Atlantic	18.8	22.6	18.1	19.1	130	122	135	177
East South Central	6.5	5.0	6.3	13.6	45	27	47	126
West South Central	11.3	16.6	14.0	22.3	78	90	104	206
Northeast	9.7	13.2	9.8	-1	67	71	73	-1
North Central	10.8	16.1	9.6	3.6	74	87	72	33
West	40.4	38.9	24.2	23.3	279	210	181	216
United States	14.5	18.5	13.4	10.8	100	100	100	100
<b>Employment <sup>1/</sup></b>								
				1969-79				1969-79
South	23.3	14.3	23.4	32.4	87	92	120	142
South Atlantic	28.0	19.6	28.0	29.6	105	126	144	130
East South Central	14.4	2.9	15.0	28.0	54	19	77	123
West South Central	23.6	15.0	21.9	40.0	88	97	112	175
Northeast	21.4	11.2	13.3	6.7	80	72	68	29
North Central	25.7	10.3	15.9	16.5	96	66	82	72
West	52.2	38.7	28.9	40.4	196	250	148	177
United States	26.7	15.5	19.5	22.8	100	100	100	100

<sup>1</sup> Employment data for 1940-50, 1950-60 and 1960-70 are resident-based estimates of total employment; data for 1969-79 are establishment-based estimates of nonfarm wage and salary employment.

Source: U.S. Department of Commerce, Bureau of the Census and Bureau of Economic Analysis.

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**Table 1—Compound annual rates and distribution of growth in nonfarm wage and salary employment by region, 1969-79<sup>1</sup>**

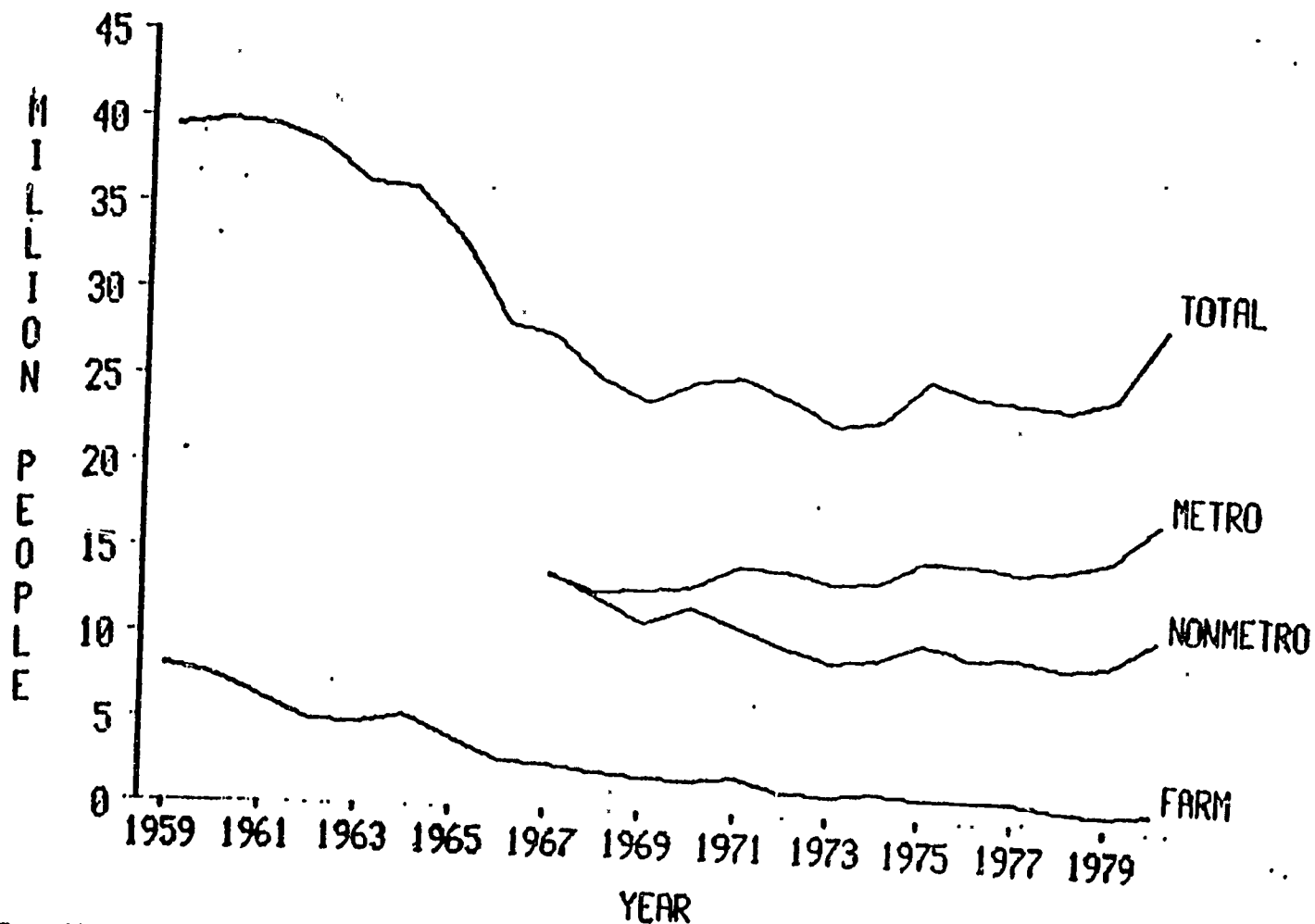
Item and Industry	United States	North-east	North Central	South	West
<i>Million</i>					
All Industries: Total employment, 1979	94.5	21.0	24.8	30.4	18.3
<i>Thousand</i>					
Average annual absolute employment change	1,755	131	352	743	528
<i>Percent</i>					
Compound annual rate of employment change:					
All Industries	2.1	.8	1.5	2.8	3.5
Goods-producing industries	.8	-1.2	.1	2.2	3.0
Mining	4.4	1.9	2.5	5.3	4.4
Contract construction	2.3	-1.2	.8	3.6	5.3
Manufacturing	.4	-1.2	-.1	1.6	2.2
Service-producing industries	2.6	1.5	2.3	3.1	3.6
Agricultural services <sup>2</sup>	6.0	2.7	3.4	6.6	8.2
Wholesale and retail trade	3.1	1.5	2.4	4.2	4.5
Transportation, communications, and public utilities	1.4	-.2	.9	2.6	2.4
Finance, insurance, and real estate	3.4	1.5	3.0	4.5	5.3
Services	3.5	2.7	3.5	3.3	5.0
Government	1.3	.7	1.2	1.7	1.5
Percentage of absolute total change:					
All industries	100.0	100.0	100.0	100.0	100.0
Goods-producing industries	11.8	-58.5	2.1	22.5	20.7
Mining	1.9	.9	.9	3.0	1.3
Contract construction	5.3	-6.8	2.4	7.2	7.5
Manufacturing	4.6	-52.6	-1.2	12.3	11.9
Service-producing industries	88.2	158.5	97.9	77.5	79.3
Agricultural services <sup>2</sup>	1.3	1.1	.6	1.2	1.3
Wholesale and retail trade	30.6	44.7	33.4	29.1	27.5
Transportation, communications, and public utilities	3.9	-1.5	3.3	5.0	4.0
Finance, insurance, and real estate	8.1	13.6	8.8	7.0	7.5
Services	31.4	81.9	38.6	21.5	28.0
Government	12.9	-18.7	13.2	13.8	10.0

<sup>1</sup>Detail may not add exactly to totals due to rounding.

<sup>2</sup>Mostly agricultural services employment, but also includes forestry and fisheries employment.

Source: Compiled from unpublished data from the Bureau of Economic Analysis, U.S. Department of Commerce.

FIG. 1--TOTAL, FARM, METRO, AND NONMETRO POOR PEOPLE, 1959-80



SOURCE: U.S. CENSUS BUREAU, 1969, 1970, 1973, 1975, 1977, 1978, 1979, 1980.

Table 2

Reasons poor families did not work, by residence, 1979

Item	Residence	
	Metro	Nonmetro
	Pct.	
Family heads who did not work	53.5	46.7
Main reason for not working:		
Ill or disabled	27.2	39.9
Keeping house	46.1	29.6
Going to school	4.5	.6
Unable to find work	6.3	5.3
Retired	13.6	22.8
Other	2.4	1.6
Total	100.0	100.0

Source: U.S. Census Bureau, 1981a.

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### III. RURAL SCHOOL DISTRICTS AND SCHOOLS

It is as hard to generalize about rural schools as it is about rural places and rural people. Like their urban partners, rural schools today reflect an accumulated effect of past social policies and education theories. And like their own communities, they reflect the diverse cultures and conditions of rural America. Rural communities are as different as Wyoming and New Jersey, or Maine and California. Yet through their schools and other institutions, rural places share elements of a national culture; and rural students everywhere participate in many national folkways.

Some critics of current rural schools claim there is too much of the national culture in rural education, while other advocates insist that equality of opportunity requires more familiarity with the dominant culture than is now provided. To some degree, the debate about the best way to educate rural students hinges on the kind of rural one has in mind. There is no question that national and local cultures meet in the rural school; the questions are about how and to what degree they meet; and, having met, how much merging is desirable.

In any time (as historians are fond of pointing out), so much of the ideology of a particular era (for example, American Society since World War II) becomes transposed in everyday life into the assumption "this is the nature of things," that it is hard for contemporary observers to assess -- or even identify -- the things that make life better or worse.

For contemporary educators, it is hard to identify particular school characteristics that matter most for the education of youth and the future of a society. Sometimes educational policy changes that occur within a decade or so -- and that are nothing more than a return to practices discarded earlier because the conventional wisdom of the time saw reason to do so -- are announced or perceived as new directions. A recent example is the seventies emphasis on basic education, with accompanying elaborate procedures for accountability. Historically, basic education was all that most students could hope for before the 1930s; it was the increase in numbers of young people attending high school that made it possible to speak nationally about a high quality of education for everyone. Thus it was somewhat ironic when schools in the 1970s announced a return to basics as though it were a great advance in education theory. After a decade of schools emphasizing the basics, data trend watchers in the research community have now started sending out warnings that the losers may have been the academic subjects and students with better than average scholastic aptitude. The trend now appears to be "back to excellence" (especially through math and science). Shades of Sputnik, the National Science Foundation, and the National Defense Education Act!

The degression on education basics versus education excellence was intended to illustrate the point of how hard it is to see rural schools (or any schools) in the context of the many policies that have shaped them over time into what they are today. Most people who have studied rural schools -- or who write about them -- agree that rural is different

from urban; but there is little agreement about what the difference is. Some might argue that rural, suburban, and urban schools should not be compared. Many states, for example, do not provide data on metro and nonmetro differences in student outcomes.

Ultimately, however, one can determine the status of rural schools and students only by comparing their resources and outcomes with all schools and with metropolitan schools. Some comparisons are straightforward -- e.g., the proportion of urban and rural students having opportunities to study certain advanced subjects. Others are very difficult -- e.g., the meaning of rural-urban equity in school finance -- and would require the use of sophisticated methodologies that are far beyond the scope of this modest study.

In keeping, then, with the full report, this section has a modest agenda. It will deal with the question of numbers, giving considerable attention to state and regional variations. (Section V describes how rural, urban, and suburban schools compare on student reports of curricula, special services, and extra curricular activities.) Some very small school characteristics will also be discussed briefly in this chapter.

#### Numbers of Rural School Districts, 1929-30 to 1981-82

It is easy to see that a change of major proportions has occurred in schooling since 1930. School have been drastically reduced in number and

they have grown substantially in size. (See Tables III-1 - III-2). In 1930 the United States had 128,000 districts but fewer than 17,000 in 1973, a decline of about 111,000. There were 238,000 elementary schools in 1930 and fewer than 65,000 in 1972, which means that they declined by 173,000. A more striking diminution is seen in one-teacher schools, which declined from 149,000 to just under 1,500 in the same period. For secondary schools the picture is different, as will be apparent later.

School consolidation occurred for a number of reasons, not least among them the school reformers' belief that larger schools could provide better educational opportunities for students than small schools while achieving greater efficiency through economies of scale. That belief was accepted as "conventional wisdom" until recent years and, according to Jonathan Sher and some others, was adopted too much in wholesale fashion. Since the late seventies, however, the issue of school consolidation has been debated vehemently -- but once again in the context of a particular era's social reality. A popular sentiment in many American communities of the 1970s was that "small is beautiful." That sentiment entered into debates about education in many places as increasingly militant citizen groups throughout the country mounted sophisticated challenges to the conventional notion that small schools inherently lack capacities for academic excellence and financial efficiency.

Compared with the preceding decades, a substantial body of research on rural education has been generated in the past few<sup>w</sup> years as researchers have tried to gather empirical information about the characteristics and

effectiveness of rural and small schools. Not all the evidence is in at this time; rural education still lacks the definitive studies of curriculum, teaching, finance, and student outcomes that are needed for comprehension of the big picture and the variations within it. Problems continue to exist, moreover, in federal education data collection and analyses, almost always for very small schools and very often for all nonmetro schools. These problems notwithstanding, enough information can be extracted from various sources to permit tentative testing of some "new" and "old" conventional wisdom about rural and small schools.

This section will examine the "conventional wisdom" assumption that the fifty-year trend to consolidate schools is abating. In most cases, national figures will be used and, wherever possible, supplemented with regional or local data.

#### District Size and Organization

Today's conventional wisdom about consolidation may be that not much more of it seems likely. In parts of the nation with vast spaces separating farms or ranches and formidable distances between small communities, consolidating schools might mean that students would have to board away from home during the school week. Since most remaining very small schools are in Western and Plains states where distance and sparse populations are characteristics, this seems a reasonable conjecture. In the Southeast, on the other hand, small schools are so rare that few are left to consolidate (except in Arkansas). During the late 1950s and the



1960s, schools throughout the region underwent consolidation in response to the 1954 Supreme Court Decision, Brown vs. Board of Education of Topeka, KS. Other states, however, may continue to face school closing questions, Illinois being an especially graphic example. Illinois is the seventh most urban state but has the fourth largest number of operating school districts in the nation. Most small Illinois districts are in the state's rural farm areas, which are denser than rural settlements in the Rocky Mountain and Plains State. With declining enrollments a reality and the projection for 1989 as the nadir in school enrollment, some further consolidation may be likely in places where small schools are not separated by great distances. <sup>2</sup> (Bussard and Green, P. 1).

Speculations aside, the data in Table III-1 indicate that the hypothesis, "the fifty-year trend to consolidate schools is abating," cannot be rejected. For example, it is a characteristic of the years from 1945-46 to 1959-60 that at least 7,000 districts were lost each year. In three of those years, the number lost was 10,000 or greater. From 1961-62 until 1967-68, 4,000 to 5,000 districts were lost each year. Since 1970-71, however, the decline has been reduced substantially. From 1975-76 to 1976-77, districts declined in numbers by only 205. The number of independent districts declined by only 659 between 1972 and 1982 (1982 Census of Governments, p. 2).

Table III-2

Year	Number of Independent School Districts
1962	34,678
1967	21,782
1972	15,781
1977	15,174
1982	15,032

(Source: Governmental Units in 1982)

The picture of decline for elementary schools is similar (See table III-3. The greatest number of schools were lost in the forties (almost 75,000) and the fifties (41,000). In the thirties and the sixties, approximately 24,000 schools were closed in each decade. By the seventies, however, declining numbers were a trickle compared to earlier floods. Eight thousand elementary schools were closed between 1970-71 and 1976-77, with about five-eighths of the closings occurring in the first year of the decade.

The pattern for one-teacher schools is the same (See Table III-4). The majority of closing occurred in the fifties (almost 50,000) and in the forties (46,000). Both the thirties (with 28,000 closings) and the sixties (with 22,000) were also heavy consolidation years. By the early 1970s, however, the closing trend showed signs of wearing out -- but then there are very few one-teacher schools left to close and even a modest rate of closing would see their demise within a few years.

The story of secondary schools is different, with the number increasing by 1,448 between 1929-30 and 1976-77 (See Table III-5). The

Table III-3  
Elementary Schools  
1929 to 1977

Year	No.	Change
1920-30	238,306	
1931-32	232,750	5,656
1933-34	236,236	3,486
1935-36	232,174	4,062
1937-38	221,600	<u>10,574</u>
		23,978
1939-40	(NA)	
1941-42	183,112	38,488
1943-44	169,905	13,207
1945-46	160,227	9,678
1947-48	147,760	<u>13,467</u>
		14,840
1949-50	127,225	18,535
1951-52	123,768	4,457
1953-54	110,875	12,893
1955-56	104,427	6,448
1957-58	95,446	<u>8,981</u>
		41,324
1959-60	91,853	3,593
1961-62	81,910	9,743
1963-64	77,584	4,326
1965-66	73,216	4,368
1967-68	70,879	<u>2,337</u>
		24,367
1970-71	65,800	5,079
1973-74	65,070	730
1975-76	63,242	1,728
1976-77	62,644	<u>598</u>
		6,135

Source: Digest of Education Statistics, 1980, p. 60

Table III-4

One Teacher Schools  
1929-30 to 1976-77

Year	No.	Change
1929-30	149,282	
1931-32	143,391	5,891
1933-34	139,166	4,225
1935-36	131,101	8,065
1937-38	121,178	<u>9,923</u>
		28,104
1939-40	113,600	7,578
1941-42	107,692	5,908
1943-44	96,302	11,390
1945-46	86,563	9,739
1947-48	75,096	<u>11,467</u>
		46,082
1949-50	59,652	15,444
1951-52	50,742	8,910
1953-54	42,865	7,877
1955-56	34,964	7,901
1957-58	25,341	<u>9,623</u>
		49,555
1959-60	20,213	5,128
1961-62	13,333	6,880
1963-64	9,895	3,438
1965-66	6,431	3,404
1967-68	4,146	<u>2,345</u>
		21,196
1970-71	1,815	2,331
1973-74	1,365	450
1975-76	1,166	299
1976-77	1,111	<u>55</u>
		3,135

lowest year in closings for this group of schools was 1951-52, with 23,746. The highest year, with 28,973, was 1941-42. This striking difference from the other categories is undoubtedly related to the different pattern of high school enrollment, which grew from 4.4 million in 1939 to 14.4 million in 1975. The trend between 1889-90 and 1978 was one of progressive increases in enrollment, with the exception of the years 1943-44 to 1951-52, when enrollment dropped below six million and did not exceed that number until 1953-54. This deviation took place when the U.S. was at war in Europe and the Pacific; many high school youths presumably volunteered for active duty before completing school.

Enrollment in the forties rose from about 5.6 million to 6.4 million; in the fifties from 5.8 million at the beginning to 7.9 million at the end; and in the sixties from 8.5 million at the beginning to 13.1 million at the end. In the seventies, secondary enrollment began at 13.9 million in 1971, reached a peak of 14.4 million in 1975, and declined slightly over the next two years to reach 14.2 million in 1978. A point of interest, there, is that whereas public secondary enrollment more than tripled between 1929-30 and 1977, the number of high schools during that time grew by only 1,148 -- from 25,378 to 29,930. High schools have obviously been getting larger. Many existing schools now replace smaller ones and were built in lieu of additional small schools. It is probably true that high school consolidation has not met the degree of resistance evoked when elementary school closings are proposed. The age of high school students, along with a recognized need for diversity in the secondary curriculum, may explain why secondary reorganization appears to meet with greater acceptance.

## Nonmetro Schools in 1981-82

In 1981-82, sixty-six percent of all U.S. public school districts were in nonmetro communities. As Table III-6 indicates, these schools made up at least half the total school district population in every census region. The South led in nonmetro percentages, with 73 percent, and was followed by the North Central (71 percent), the West (66 percent), and the Northeast (50%). Table III-7 shows how each state ranked on its proportion of nonmetro districts, from first to last. Nine states had districts that were between 91 and 100 percent nonmetro, while nine others were in the 81-90 percent category. In 33 percent of the states, two-thirds or more of all districts were rural. In only 7 states were there fewer than 40 percent rural districts.

The figures in Table III-8 hint at how different regions of the country handle questions of district size and organization. In the predominantly rural South, which by census methods has the most people and the most states, there were on the average only 161 nonmetro districts in each state and an average of 221 total districts in each state. In contrast, the more sparsely-settled West (which had only 57 percent of the South's population in 1980 had averages of 171 nonmetro districts and 259 total districts. These differences reflect the South's tendency to organize districts by county lines as well as the presence of many tiny and isolated school districts in the low-density Plains and Rocky Mountain States. Northern New England states, as well as some North Central states, tend to organize schools on the town or township model and also have respectable proportions of smaller schools.

Table III-6  
School Districts by Metropolitan Status and  
4 Regions, 1981-82

	Central City	Other SMSA	Nonmetro	Total
Northeast				
Number	85	1,655	1,759	3,500
Percent	2	47	50	100
North Central				
Number	101	1,825	4,741	6,667
Percent	2	38	71	100
South				
Number	120	839	2,573	3,532
Percent	3	24	73	100
West				
Number	62	1,004	2,047	3,113
Percent	2	32	66	100
All Regions				
Number	369	5,323	11,120	16,812
Percent	2	32	66	100

Table III-7

States Ranked by Percent of  
Nonmetro Districts, 1981-82\*

	State	Percent		State	Percent
1.	Vermont	100	26.	Oklahoma	73
	Wyoming	100		Utah	73
3.	Alaska	98	28.	Louisiana	72
4.	Idaho	97	29.	Wisconsin	68
	South Dakota	97		Virginia	68
6	New Mexico	96		Washington	68
	North Dakota	96	32.	Arizona	67
	Nebraska	96	33.	Oregon	66
9.	Maine	95	34.	Alabama	65
10.	Montana	93	35.	Florida	64
11.	Mississippi	90		Texas	64
12.	Nevada	88	37.	Maryland	58
13.	Iowa	87	38.	Indiana	57
14.	Arkansas	85	39.	Massachusetts	54
16.	West Virginia	85	40.	Illinois	52
	New Hampshire	84	41.	Michigan	48
18.	Georgia	81	42.	New York	41
	Kentucky	81	43.	Ohio	39
20.	North Carolina	80	44.	California	39
21.	Colorado	79	45.	Connecticut	36
22.	Missouri	78	46.	Pennsylvania	32
23.	Minnesota	76	47.	Rhode Island	24
	Tennessee	76	48.	New Jersey	17
25.	South Carolina	74	49.	Delaware	0

\* Does not include Hawaii, which has only one district



There are two points to be made about data from this table before proceeding to look more closely at questions of size. The first point is that rural schools and districts are not necessarily small, if one accepts census definitions. The issue of size can lead to disagreement among rural people about what is and is not a rural school. Undoubtedly, very small schools have some distinct needs, problems, and strengths; what works in large consolidated schools in Georgia may not be possible in smaller Nebraska schools. Size differences should certainly be respected in policy considerations. On the other hand, the large majority of schools in the nonmetropolitan category warrant policy consideration because so many of the nation's students are educated in schools with a distinctly rural character. To varying degrees, rural schools are more removed than their urban and suburban counterparts from educational resources and social services. Distance (which admittedly varies among rural districts) presents problems of transportation costs (for the school system) and time (for students). Rural culture has the advantage of close proximity to an outdoor life and the educational resources it makes possible, but rural places lack easy access to city amenities and their accompanying educational benefits. And although size varies a great deal among rural schools, on the whole they are smaller than urban and suburban schools.

Table III-8  
School Districts by Region and State

NORTHEAST

State	Nonmetro Districts	Total Districts	% Nonmetro
CT	59	165	36
ME	313	329	95
MA	254	470	54
NH	186	221	84
NJ	106	623	17
NY	320	783	41
PA	179	536	33
RI	10	41	24
VT	332	332	100

NORTH CENTRAL

State	Nonmetro Districts	Total Districts	% Nonmetro
IL	523	1,011	52
IN	186	326	57
IA	398	456	87
KS	261	306	85
MI	306	631	48
MN	390	514	76
MO	430	549	78
NE	1,115	1,161	96
ND	345	358	96
OH	259	666	39
SD	202	209	97
WI	326	480	68

SOUTH

State	Nonmetro Districts	Total Districts	% Nonmetro
AL	83	127	65
AR	315	371	85
DE	0	19	0
FL	43	67	64
GA	151	187	81
KY	146	180	81
LA	49	68	72
MD	14	24	58
MS	142	157	90
NC	115	143	80
OK	473	652	73
SC	72	97	74
TN	112	147	76
TX	704	1,098	64
VA	95	139	68
WV	46	55	84

WEST

State	Nonmetro Districts	Total Districts	% Nonmetro
AK	51	52	98
AZ	162	242	67
CA	425	1,084	39
CO	159	201	79
ID	112	115	97
MT	528	569	93
NV	15	17	88
NM	85	89	96
OR	225	340	66
UT	29	40	73
WA	203	300	68
WY	53/2,047	53/2,047	100

## VERY SMALL SCHOOLS

In 1979, the National Institute of Education provided support for a study of very small schools. Although the study is not yet completed, some preliminary data from the study have been made available and will be mentioned here. The Small Schools Study (which is now based at Dartmouth College) has examined schools in three categories:

- 1) Elementary schools with fewer than 15 pupils per grade
- 2) High schools with fewer than 200 pupils
- 3) K-12 (or 1-12) schools or districts with fewer than 300 pupils

Tables II-9 and III-10 show the national distribution of small schools and their distribution by region and school type. As the two tables indicate, a large majority of small U.S. schools are west of the Mississippi and in the Plains and Western States.

Table III-9

### National Distribution of Small Schools

<u>Region</u>	<u>% of all schools</u>
Northeast	5.7
Southeast	5.9
Midwest Central	6.1
West	22.5
Plains	59.8

Table III-10

Distribution of Small School by Region and School Type

<u>Region</u>	<u>Number of Schools</u>		
	<u>Elementary</u>	<u>High School</u>	<u>K-12</u>
Northeast	179	9	153
Southeast	181	101	73
North Central	179	110	73
West	745	334	263
Plains	1,598	1,094	877

The Small School Project is, according to its director, "the first national study of small rural schools done in the century"; it has enabled the project staff to "paint in broad strokes the general outlines of the United States' smallest public schools -- their weaknesses, their resources, and their potentials."<sup>3</sup>

With respect to questions of small size and the possibility of consolidation, certain findings are relevant for this discussion. When a sample of school administrators was asked about changes in student enrollment between 1975 and 1980, forty-two percent replied that it had decreased (see Table III-11). Only twenty-eight percent reported an increase in students, but thirty-two percent said that faculty size had increased. Carlsen and Dunne have observed that very small schools with declining enrollments are "having to deal with the expense of maintaining underutilized facilities" and teaching quality where class sizes are dropping but pupil costs are rising.<sup>4</sup>

When asked about pressures to consolidate, fifty-seven percent of the respondents said that there were none, with only twelve percent claiming there was substantial pressure. Most respondents said there would be serious disadvantages if their schools should be consolidated, with transportation problems leading the list. Fewer than five percent saw no disadvantages (Table III-13). On the other hand, almost thirty-eight percent replied that consolidation would have no advantages. (Table III-12). Carlsen and Dunne concluded that a characteristic of communities with small schools is an intense commitment to retaining their schools "even in the face of pressure, even in the face of apparent financial advantage if consolidation takes place." <sup>5</sup> (P. 303).

Table III-11  
Changes in Size of Faculties and Student Bodies

Table III-12  
Perceived Advantages of Consolidation

Table III-13  
Perceived Disadvantages of Consolidation

## SUMMARY

While the evidence is not conclusive, it seems that the massive consolidation of rural schools has been halted. School closings will continue in some rural places as well as in cities in suburbs, but it seems unlikely that a general policy of consolidating whenever possible will be followed. Most of the nation's smallest schools are in places that are sparsely settled (like farming and ranching communities) or isolated by geography (like islands and mountains). Demographic trends will help determine the fate of rural schools in the future and should be carefully monitored by local districts if they are to make realistic plans for educating rural youngsters.

The emergence of citizens groups concerned about retaining local schools is another indication that reorganization questions may be examined more on a case-by-case basis than has been true in the past. In addition, there are more systematic studies of the advantages and disadvantages of school consolidation than there were a few years ago. One result may well be that communities and policymakers will be better prepared to assess when consolidation makes sense educationally and economically and when it does not.

There remains, however, the possible problem of an information lag. Although there is considerable sophistication among rural school advocates about prior reformers' excessive claims about consolidation benefits, the knowledge is not yet general enough to warrant assurance

that, as school closings are considered, methodologies appropriate for determining genuine assessments of costs and quality will be used. If this is to happen, better mechanisms than currently exist for disseminating the results of recent studies may be necessary at federal and state levels.

#### IV. RURAL ELEMENTARY AND HIGH SCHOOL STUDENTS IN THE CENSUS REGIONS

In the more than 11,000 nonmetro school districts of rural America, there were 12.4 million elementary and secondary students in 1981-82. In that year, thirty-one percent of all students were nonmetropolitan. Five and one-half million attended school in the South and accounted for thirty-nine percent of all Southern students. There were 3.5 million nonmetro students in the North Central Region, or thirty-four percent of all North Central students. The West had 1.8 million (20.3 percent) and the Northeast had 1.6 million (twenty percent).

When the rural student populations in the states are examined, some striking facts are apparent. Nine states were between 71 and 100 percent nonmetro in their student population, and nineteen were more than fifty percent nonmetro. Thirty states (or 60 percent) were at least one-third metro by this measure. In only seven states did nonmetro students account for less than 20 percent of all students (Table IV-3).

The numbers tell yet another story. The nine states that were more than seventy percent rural in their student population contained only 1.4 million nonmetro students, or 12 percent of U.S. nonmetro students. On the other hand, the six states (not counting Delaware, which has no nonmetro students) with fewer than 20 percent rural students accounted for nine percent of the U.S. total. Texas and North Carolina alone account for 13 million rural students -- more than ten percent of the total. Three of the most urban states in the nation -- Illinois, New



Table IV-1

Students by Metropolitan Status and  
4 Regions, 1981-82

	<u>Central City</u>	<u>Other SMSA</u>	<u>Nonmetro</u>	<u>Total</u>
Northeast				
Number	2,138,648	4,197,910	1,577,707	7,914,265
Percent	27	53	20	100
North Central				
Number	2,347,422	4,561,753	3,514,574	10,423,749
Percent	23	44	34	100
South				
Number	3,005,048	5,477,718	5,479,640	13,962,406
Percent	22	39	39	100
West				
Number	1,814,714	4,134,594	1,810,352	7,759,660
Percent	23	53	23	100
All Regions				
Number	9,305,832	18,371,975	12,383,273	40,060,080
Percent	23	46	31	100

### Nonmetro Students, Total Students, and Percent Nonmetro, by State (1981-82)



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York, and California -- have almost 1.2 million nonmetro students, which is close to 10 percent of the total (Table IV-4).

Seven states have more than 400,000 rural students, while twelve others have between three and four thousand. Eight have between 200 and 300 thousand, thirteen have between 100 and 200 thousand, and nine have fewer than 100 thousand. Some of the nations most rural states are in the last category: Vermont, Wyoming, and Arkansas.

However the numbers are viewed, one fact seems clear. Rural education is a national concern, and the concern of virtually every state. In some states, most students are rural. In others, the rural proportion is small but the numbers are substantial. And in others, the rural student population is a minority in both numbers and proportion.

### The Educational Attainment of Nonmetro Populations

#### Attainment

Rural Americans as a group are educationally disadvantaged when they are compared with inhabitants of cities and suburbs. This was true in 1970 and continued to be true throughout the decade, although most racial and ethnic groups improved their status during that time. In 1970, for example, 56 percent of metro females but only 48 percent of nonmetro females had finished high school. In 1979 the figures were 70 percent and 62 percent, respectively, with the difference remaining about eight

Table IV-3

States Ranked by Percent of  
Nonmetro Students\* (1981-82)

1. Vermont	100	27. Missorui	40
2. Wyoming	100	28. Indiana	38
3. North Dakota	88	29. Virginia	36
4. South Dakota	85	30. Minnesota	34
5. Idaho	83	31. Washington	30
6. Maine	80	32. Arizona	29
7. Mississippi	79	33. Colorado	29
8. Montana	77	34. Ohio	24
9. New Mexico	71	35. Pennsylvania	23
10. West Virginia	69	Texas	23
11. Iowa	62	37. Illinois	22
12. Arkansas	62	Utah	22
Kentucky	62	39. Massachusetts	21
14. North Carolina	58	Michigan	21
15. Alaska	58	41. Florida	20
16. New Hampshire	57	Nevada	20
17. Nebraska	57	43. Maryland	17
18. Kansas	55	44. New York	14
19. South Carolina	54	45. Connecticut	13
20. Wisconsin	46	46. New Jersey	10
21. Georgia	44	47. Rhode Island	10
Oklahoma	44	48. California	9
23. Tennessee	43	49. Delaware	0
Oregon	43		
25. Alabama	42		
Louisiana	42		

\* Hawaii is not included

Table IV-4

## States Ranked by Number of Nonmetro Students

1981-82

1. Texas	665,479	26. Washington	226,482
2. North Carolina	644,778	27. Kansas	226,368
3. Georgia	469,510	28. Massachusetts	199,065
4. Ohio	461,237	29. Oregon	195,796
5. Pennsylvania	419,891	30. New Mexico	188,382
6. Illinois	412,049	31. Maine	176,980
7. Kentucky	408,732	32. Idaho	168,558
8. New York	399,746	33. Colorado	159,174
9. Indiana	389,684	34. Nebraska	156,155
10. Mississippi	375,912	35. Arizona	138,412
11. Wisconsin	369,257	36. Maryland	121,671
12. Tennessee	366,579	37. Montana	117,959
13. Michigan	362,748	38. New Jersey	115,746
14. California	356,157	39. South Dakota	107,162
15. Virginia	351,313	40. North Dakota	103,241
16. South Carolina	329,187	41. Wyoming	98,424
17. Missouri	326,435	42. Vermont	93,425
18. Louisiana	325,469	43. New Hampshire	93,019
19. Iowa	322,628	44. Utah	78,951
20. Alabama	298,185	45. Connecticut	66,146
21. Florida	291,598	46. Arkansas	52,604
22. Minnesota	277,616	47. Nevada	29,453
23. Arkansas	273,155	48. Rhode Island	13,699
24. West Virginia	262,224	49. Delaware	- 0 -
25. Oklahoma	254,994	50. Hawaii	- 0 -

Table IV-6

## 4 Years of College or More

Race/Ethnicity and Metro/Nonmetro Status	1970		1977		1979	
	M	F	M	F	M	F
Total Population	13.6	8.2	19.2	12.0	20.4	12.9
Metro	15.7	8.9	22.0	13.3	23.0	
Central Cities	13.9	8.4	19.9	12.6	20.5	
Suburbs	17.2	9.5	23.5	14.1	24.4	
Nonmetro	9.2	6.6	13.3	9.4	15.0	
White	14.5	8.5	20.2	12.4	21.4	13.3
Metro	16.8	9.3	23.4	13.7	24.4	14.7
Central Cities	15.7	9.1	22.5	13.2	23.0	14.7
Suburbs	17.6	9.6	23.9	14.1	25.1	14.7
Nonmetro	9.7	6.8	14.1	9.8	15.7	10.5
Black	4.2	4.6	7.0	7.4	DATA NOT AVAILABLE	
Metro	4.7	4.8	8.3	8.1		
Central Cities	4.5	4.5	6.9	7.1		
Suburbs	5.4	5.6	12.5	11.5		
Nonmetro	2.7	4.0	3.1	5.2		
Hispanic	6.1	3.1	DATA NOT AVAILABLE		8.2	5.4
Metro	6.2	3.2			8.7	5.6
Central Cities	6.0	2.7			7.5	4.9
Suburbs	6.7	3.9			10.3	6.6
Nonmetro	5.6	2.4			5.2	3.8

percentages points. Nonmetro males lagged metro males with high school diplomas by eleven percent in 1970 and by almost the same amount in 1979 (Table IV-5).

Differences in college degrees are also striking. Between 1970 and 1979 metro females with four or more years of college increased from nine percent to fourteen percent. Nonmetro females in this category were not quite seven percent in 1970 and had increased to only 10.\_\_\_\_ percent in 1979. Almost sixteen percent of nonmetro males had four or more years of college in 1970; by 1979 the college educated had grown to twenty-three percent. (Table IV-6).

For both metro and nonmetro populations, education attainment increased between 1970-77 and 1977-79. With few exceptions, however the gaps between metro and nonmetro populations were not appreciably narrowed.

In 1970, 1977, and 1979, nonmetro males had the highest rate of illiteracy of any group in the nation. For this group the rate declined, however, from eight percent to five percent during the decade. Suburban females had the lowest rates of illiteracy: 3.3 percent in 1970, 2.1 percent in 1977, and 2 percent in 1979. The metro male population's functional illiteracy rate declined by 2.7 percent between 1970 and 1979, from almost five percent to 3 percent. Functional illiteracy in all types of communities and for both sexes had declined to five percent or less by 1979. These figures mask a more serious illiteracy rates for minorities, however. In 1977, for example, functional illiteracy

Table IV-5

Percentage of Whites, Blacks, and Hispanics  
With 4 or More Years of High School

Race/Ethnicity and Metro/Nonmetro Status	1970		1977		1979	
	M	F	M	F	M	F
Total Population	52.3	53.3	65.6	64.6	68.4	67.1
Metro	55.7	55.7	69.3	67.1	71.9	69.7
Central Cities	51.4	50.7	64.5	61.2	67.4	64.1
Suburbs	59.3	60.2	72.6	71.7	75.0	73.8
Nonmetro	44.8	47.9	57.9	58.6	61.4	61.7
White	54.45	55.5	67.5	66.5	70.3	69.2
Metro	57.9	57.9	71.3	69.2	73.9	71.7
Central Cities	54.7	53.8	67.9	63.9	70.6	67.1
Suburbs	60.3	61.1	73.3	72.5	75.8	74.5
Nonmetro	47.0	50.4	60.1	61.3	63.4	64.2
Black	30.1	32.4	46.5	45.4	DATA NOT AVAILABLE	
Metro	34.4	36.6	50.3	50.6		
Central Cities	34.5	36.5	47.9	49.4		
Suburbs	33.7	36.9	57.1	54.5		
Nonmetro	16.9	19.8	31.5	30.7		
Hispanic	33.2	30.9	DATA NOT AVAILABLE		42.3	41.8
Metro	34.6	31.8			43.5	42.6
Central Cities	32.4	28.6			40.9	38.8
Suburbs	38.5	37.7			47.1	48.0
Nonmetro	26.6	26.4			35.5	36.4



55

Change	% of Schools	
	Faculty	Student Body
Increase in size	32.4	27.6
No change	52.5	30.0
Decrease in size	15.1	42.4

**TABLE 3: Changes in Size of Faculties and Student Bodies**

Advantage	% of Total Responses
No advantage	37.6%
Expanded curriculum	27.8
More money, lower taxes	8.7
Better facilities, supplies	6.8
More students, better teams	6.5
Competition among students	5.7
Exposure to different types of people	2.7
Other	6.5

**TABLE 4: Perceived Advantages of Consolidation**

Disadvantage	% of Total Responses
No disadvantage	4.6%
Transportation problems	42.9
Lose community cohesion, an important part of the community	16.9
Loss of individual attention	16.5
Loss of community control over education	7.3
Discipline or drug problems	6.5
Lowered quality of instruction	3.8
Other	1.5

**TABLE 5: Perceived Disadvantages of Consolidation**

rates ranged from less than 2 percent for suburban white females to 22.5 percent for nonmetro black males.

### Nonmetro Blacks

On all three measures of education attainment, rural blacks lagged both metro blacks and rural whites in 1970 and 1977. (Data were not available for 1979) This was true for both sexes. In 1970, less than 17 percent of nonmetro black males had a high school education, compared with 34.4 percent of black males in metro areas, 47 percent of nonmetro white males, and 60.3 percent of suburban white males. Nonmetro black female graduates compared similarly to nonmetro and suburban white females. By 1977, 31.5 percent of nonmetro blacks had 4 years or more of high school, but had not closed the gap between themselves and other groups. Differences between rural black males and females are shown below:

Table IV-8

	<u>Metro blacks</u>	<u>Nonmetro whites</u>	<u>Suburban whites</u>
Nonmetro Males	-19.8	-28.6	-41.8
Nonmetro Females	-19.9	-30.6	-41.3

Functional illiteracy among blacks is declining but the substantial differences between blacks and whites that existed in 1970 had not decreased appreciably by 1977. (Table IV-7) Nonmetro black males illustrate this problem very well because they consistently had the

Table IV-7

## Functional Illiteracy

Race/Ethnicity and Metro/Nonmetro Status	1970		1977		1979	
	M	F	M	F	M	F
Total Population	5.9	4.8	4.0	3.5	3.7	3.2
Metro	4.9	4.5	3.2	3.1	3.0	2.8
Central Cities	6.2	5.7	4.6	4.3	4.1	4.0
Suburbs	3.8	3.3	2.2	2.1	2.3	2.0
Nonmetro	8.1	5.6	5.7	4.2	5.1	4.0
White	4.7	4.0	3.1	2.8	2.8	2.6
Metro	4.0	3.8	2.6	2.7	2.3	2.4
Central Cities	4.9	5.0	2.6	3.9	3.0	3.5
Suburbs	3.3	2.9	2.0	1.9	1.9	1.7
Nonmetro	6.2	4.2	4.3	3.1	3.8	3.0
Black	17.7	4.0	12.0	8.0	DATA NOT AVAILABLE	
Metro	13.0	3.8	8.5	5.6		
Central Cities	12.1	5.0	8.9	5.6		
Suburbs	16.5	2.9	7.4	5.7		
Nonmetro	32.0	4.2	22.5	14.9		
Hispanic	19.5	11.7	DATA NOT AVAILABLE		17.8	17.5
Metro	17.6	8.9			16.1	16.2
Central Cities	18.2	8.4			15.6	17.5
Suburbs	16.6	11.0			16.8	14.6
Nonmetro	23.8	20.4			27.2	24.9

highest rates of functional illiteracy between 1970 and 1977. At the beginning of the decade, 32 percent of Black males were functionally illiterate, compared with 13 percent of metro blacks and 6.2 percent of nonmetro whites. In other words, functional illiteracy was more than three times more prevalent among nonmetro black males than among their metro counterparts and more than five times more prevalent than among nonmetro Whites. By 1977, the differences between nonmetro and metro blacks had not diminished much, with the nonmetro rate (14.9 percent) not quite three times the nonmetro rate (5.6 percent).

Nonmetro Black females had the second highest rates of functional illiteracy -- 20.4 percent in 1970 and 14.9 percent in 1977. This was more than twice that of their metro counterparts in 1970 (8.9 percent) and 1977 (5.6 percent). It was almost five times the rate of nonmetríc white females in 1970 (4.2 percent) and 1977 (3.1 percent).

### Rural Hispanics

In some respects, Rural Hispanics had the most discouraging educational situation of any group on which information was available in 1970 and 1979. On measures of functional illiteracy, they were at the bottom, and other differences were especially pronounced for nonmetro female Hispanics.

College degrees were rare among nonmetro Hispanics and almost nonexistent for females in this group. The rate did increase for females between 1970 (2.4 percent) and 1979 (3.8 percent) however; while it declined for males by .4 percent (from 5.6 percent to 5.2 percent). In 1970, nonmetro Hispanics females had the lowest percentage of college degrees among whites, blacks and Hispanics of both sexes. They remained at the bottom in 1979, although the latest year does not include data on Blacks. On the other hand, nonmetro Hispanics males had a higher rate in 1970 than did nonmetro black males. It is not possible to make comparisons between Blacks and Hispanics in 1977 and 1979.

White and Hispanic differences are dramatic, however. For both groups of Hispanic females, there was little difference in college degree rates in either 1970 (3.2 for metro females; 2.4 for nonmetro females) or 1979 (5.4 for metro females and 3.8 for the metro group.) Nonmetro white females, however, exceeded their Hispanic counterparts by 4.4 percent in 1970, or almost three to one. By 1979, the difference was even greater, with white nonmetro females exceeding the Hispanic group by more than three to one (10.5 percent to 3.8 percent).

Difference between nonmetro and metro Hispanic males grew from 0.6 percent in 1970 to 3.5 percent in 1979, with the metro group leading. But the greatest increase in difference occurred between nonmetro Hispanics and nonmetro white males between 1970 and 1979. In the earlier

year, the difference was only 4.1 percent (not quite two to one) but by the later year nonmetro whites exceeded nonmetro Hispanics by more than three to one (15.7 percent to 5.2 percent)

Both male and female nonmetro Hispanics lagged considerably behind metro whites in 1970 and 1979, with the lag increasing for males from 20.4 percent in the earlier year to almost 26 percent in the later year. For female Hispanics, the lag was about the same in both years, about twenty-four percent. On the other hand, nonmetro Hispanics had more male and female high school graduates than did nonmetro blacks in 1970. Hispanic females led by 6.6 percent and males by 9.7 percent. It should be born in mind that the trend for both minority groups is one of absolute increase but relative stability (and sometimes small increases) in the amount of lag behind whites. Thus rural minorities are making progress in education attainment but are not closing the gap between themselves and white nonmetro students.

In 1970, functional illiteracy was almost five times as high for nonmetro Hispanic Males as for nonmetro White males, but only ninety percent of the rate for Black males. A striking aspect of the data is that virtually no reductions in illiteracy had occurred for either Hispanic males or females by 1979, whereas by 1977 Blacks had reduced

their rates by almost ten percent for males and almost 7 percent for female (thus reducing sex differences in the Black population). Nonmetro Whites by 1979 had reduced their rates of functional illiteracy from 6.2 to 3.9 percent for males and from 4.2 to 3 percent for females. With 1979 functional illiteracy rates of 27.2 for nonmetro Hispanic males and 24.9 percent for females, this group rate exceeded that of whites by almost eight times for males and more than eight times for females. This means that White/Hispanic differences have expand at a very discouraging rate since 1970.

### Summary

In the 1970s, the nonmetro population as a whole and all racial and ethnic groups within it lagged behind the metro population and the accompanying groups within it on measures of college attainment, high school attainment, and literacy rates. Within the rural population, Blacks and Hispanics were substantially behind their white counterparts at the beginning and near the end of the decade. While minority groups made absolute gains on most measures of attainment, they did not on the whole make gains relative to white nonmetro students or to the metro population. For nonmetro Hispanic females, there was no reduction in the rate of illiteracy between 19780-79, and for their male counterparts the reduction was negligible.

## Student Achievement in Rural Schools

### Basic Skills Improvements

Nationally, there are a few promising developments in student achievement. The National Assessment of Educational Progress (NAEP) as well as several studies undertaken independently by various education researchers indicate general improvement in basic skill performance between 1970 and 1980.

The National Assessment of Education Progress periodically surveys the skills and knowledge of America students aged 9, 13, and 17 in a variety of subjects: reading, writing, mathematics, science, citizenship, social studies, literature, art music, and career and occupational development. Generally, students are tested in each subject every three years. Data on reading and math for the three age groups are shown in Tables IV-9 through IV-11. NAEP began testing students in a climate of concern for deteriorating academic standards, which led schools throughout the country to emphasize "the basics." Certain groups have improved their performance on basic reading skills between 1970 and 1980:

- o Nine-year olds' overall reading level rose 3.9 percent, with highest gains in reference skills (4.8%), literal comprehension (3.9%) and inferential comprehension (3.5%).



- o Black students achieved the largest gains of all nine-year olds (9.9%).
- o They were followed by southeastern nine-year olds, who improved by 17.5 percent.
- o Rural students were next, with a six per cent gain.
- o Disadvantaged urban nine-year olds performed better by 5.2 percent.
- o Hispanic students improved twice as much as their counterparts between 1975-1980.<sup>1</sup>

Thirteen-year olds did not show the same degree of improvement between 1970 and 1980, although they had some gains. The most significant was for Black students, who improved their overall performance by 4.2 percent. The whole group improved significantly in liberal comprehension from the first to the third assessment. For seventeen-year olds, there was a significant decline in inferential comprehension.

Rural-Urban and Regional Comparisons on Reading and Mathematics, 1979-80

Tables IV-9, IV-10, and IV-11 contain the data that are the basis for this discussion. The general trends are that students who live in the northeast; who reside in advantaged urban areas, in fringes around big cities, or in medium cities; who are white, and who have college-educated parents perform best on reading and math. Females do slightly better in reading, while males do a little better in math. Students with the lowest scores live in the Southeast, attend schools in disadvantaged urban areas (and sometimes in small places), have parents who did not finish white school, and belong to a minority group.

On reading, living in the Southeast was a predictor of significantly below average reading performance for ages 9, 13, and 17. So was being a male. Minority-group status was also associated with below average performance for all three age group, as was residence in a disadvantaged urban area.

The situation in rural communities and small places is a little ambiguous. Although there were no instances of students in this category performing above the national average, in only two cases were the below average means significant. Nine-year olds and thirteen-year olds attending schools in rural communities performed significantly poorer than the national average. In all other cases, the small negative differences associated with rural place of residence were not significant at the .05 level.

Table IV-9

National Mean Percentages Correct and Mean Group Differences for  
Nine-Year Olds on Reading Comprehension and Mathematics

	Reading: All Comprehension (130 Exercises)	Mathematics All Knowledge Items	Mathematics All Skills Items
Nation	58.15	65.9	43.3
Region			
Northeast	2.58*	3.7	3.3*
Southeast	-2.24*	-4.4*	-4.3*
Central	1.09	2.8*	2.6*
West	-1.20	-2.5*	-2.0*
Sex			
Male	-2.49*	-0.7*	-0.2
Female	2.47*	0.7*	0.2
Race/Ethnicity			
White	3.36*	2.4*	2.3*
Black	-13.79*	-11.0*	-10.8*
Hispanic	13.28*	-9.2*	-7.9*
Type of Community†			
Rural	-2.54*	-4.5*	3.3*
Disadvantaged Urban	-14.72*	-10.6*	-8.9*
Advantaged Urban	9.78*	6.7*	8.9*
Size of Community			
Big cities	-3.44*	-4.3*	-3.3*
Fringes around big cities	3.21*	4.3*	3.6*
Medium cities	0.42	1.2	0.1
Small places	0.21	-0.3	-0.3
Parental Education			
Not graduated high school	-9.21*	-7.7*	-7.4*
Graduated high school	0.88	0.5	0.5
Some post high school	4.36*	5.3*	5.0*
Graduated College	2.90*	---	---
Grade			
3	-13.07*	-12.2*	-10.4*
4	5.59*	4.3*	3.6*
Achievement Class			
Lowest quarter	-13.21*	---	---
Middle-lowest quarter	7.19*	---	---
Middle-highest quarter	10.55*	---	---
Highest quarter	27.80*	---	---

\* Indicate mean percentages significantly different from the nation at the 0.5 level

† This population group represents among one third of the sample

Table IV-10

National Mean Percentages Correct and Mean Differences  
for 13-Year-Olds on Reading Comprehension, Math, and Science

	Reading: All Comprehension	Knowledge	Math Skills	Science
Nation	73.95	66.9	51.9	
Region				
Northeast	1.39	3.5*	5.0*	
Southeast	-2.71*	-5.0*	-6.5*	
Central	2.26*	2.6*	2.0	
West	-0.87	-1.9*	-2.0	
Sex				
Male	-2.09	0.1	-0.6*	
Female	2.04*	-0.1	0.6*	
Race/Ethnicity				
White	3.28*	2.9*	3.3*	
Black	-14.34*	-14.0*	16.8*	
Hispanic	-11.38*	-10.9*	-12.0*	
Type of Community†				
Rural	3.88*	7.3*	9.0*	
Disadvantaged Urban	-9.77*	-4.4*	-4.7*	
Advantaged Urban	8.49*	10.3*	12.8*	
	Reading	Knowledge	Math Skills	Science
Size of Community				
Big cities	-3.72*	-2.5*	-3.1*	
Fringes around big cities	2.05	3.6*	4.8*	
Medium cities	0.40	3.9*	5.2*	
Small places	0.11	-1.2	-1.8*	
Parental Education				
Not graduated high school	-10.46*	-7.5*	-8.9*	
Graduated high school	-0.92*	-0.6	-0.9	
Some post high school	4.47*	5.9*	6.9*	
Graduated College	4.67*			
Grade				
7	-9.27*	-8.8*	-11.6*	
8	4.07*	3.9*	5.0*	
Achievement Class				
Lowest quarter	-29.25*	---	---	
Middle-lowest quarter	-2.27	---	---	
Middle-highest quarter	10.63	---	---	
Highest quarter	20.87*	---	---	

\* Indicate mean percentages significantly different from the nation at the 0.5 level

† This population group represents among one third of the sample

Table IV-10

National Mean Percentages Correct and Mean Differences for  
13-Year-Olds on Reading Comprehension, Math, and Science

	Reading: All Comprehension	Knowledge	Math Skills
Nation	73.95	66.9	51.9
Region			
Northeast	1.39	3.5*	5.0*
Southeast	-2.71*	-5.0*	-6.5*
Central	2.26*	2.6*	2.0
West	-0.87	-1.9*	-2.0
Sex			
Male	-2.09*	0.1	-0.6*
Female	2.04*	-0.1	-0.6*
Race/Ethnicity			
White	3.28*	2.9*	3.3*
Black	-14.34*	-14.0*	-16.8*
Hispanic	-11.38*	-10.9*	-12.0*
Type of Community†			
Rural	-3.88*	7.3*	9.0*
Disadvantaged Urban	-9.77*	-4.4*	-4.7*
Advantaged Urban	-9.77*	-10.3*	-12.8*
Size of Community			
Big cities	-3.72*	-2.5*	-3.1*
Fringes around big cities	2.05	3.6*	4.8*
Medium cities	0.40	3.9*	5.2*
Small places	0.11	-1.2	-1.8*
Parental Education			
Not graduated high school	-10.46*	-7.5*	-8.9*
Graduated high school	-0.92*	-0.6	-0.9
Some post high school	4.47*	5.9*	6.9*
Graduated College	4.67*	---	---
Grade			
7	-9.27*	-8.8*	-11.6*
8	4.07*	3.9*	5.0*
Achievement Class			
Lowest quarter	-29.25*	---	---
Middle-lowest quarter	2.27*	---	---
Middle-highest quarter	10.63	---	---
Highest quarter	20.87	---	---

\* Indicate mean percentages significantly different from the nation at the 0.5 level

† This population group represents among one third of the sample

Table IV-11

1979-80  
National Mean Percentages Correct and Mean Group Differences  
for In-School 17-Year-Olds on Reading Comprehension and Math

	Reading: All Comprehension	Knowledge	Math Skills
Nation	79.09	71.7	59.0
Region			
Northeast	-0.21	1.5*	3.3*
Southeast	-2.01*	-3.5*	-4.6*
Central	0.52	2.5*	2.6*
West	1.10	-2.6*	-2.7*
Sex			
Male	-1.39*	1.1*	1.3*
Female	1.37*	-1.1*	-1.2*
Race/Ethnicity			
White	2.94*	2.6*	2.9*
Black	-16.61*	-15.5*	-17.6*
Hispanic	-7.98*	-11.8*	-12.0*
Type of Community†			
Rural	-0.66	7.6*	9.8*
Disadvantaged Urban	-10.37*	-12.5*	-13.4*
Advantaged Urban	5.88*	7.6*	9.8*
Size of Community			
Big cities	-3.34*	-2.7*	-2.1
Fringes around big cities	1.14	2.7*	3.1*
Medium cities	0.68	3.2	5.5*
Small places	0.51	-0.7	-1.6*
Parental Education			
Not graduated high school	-8.57*	-9.4*	-10.8*
Graduated high school	-2.20*	-2.5*	-3.0*
Some post high school	3.41*	5.5*	6.3*
Graduated College	4.54*	---	---
Grade			
10	-14.89	-11.5*	-13.3*
11	2.34*	2.2*	2.3*
12	5.36*	3.0*	4.4*
Achievement Class			
Lowest quarter	-26.05*	---	---
Middle-lowest quarter	1.24*	---	---
Middle-highest quarter	9.73*	---	---
Highest quarter	17.54*	---	---

\* Indicate mean percentages significantly different from the nation at the 0.5 level

† This population group represents among one third of the sample

One of the problems with NAEP's data reporting procedure is the failure to show racial and ethnic means within metro and nonmetro categories. Given the discouraging portraits of nonmetro Black and Hispanic attainment (as described earlier), and given the low socioeconomic status of nonmetro minority groups (even relative to metro minorities), one would find it strange if rural minorities were able to overcome all the conditions that inhibit their development and perform as well as their metro counterparts. Without the concrete data, however, one may only infer. Policies badly needed to combat severe types of disadvantaged situations are hard to argue from inferences. Even so, the case for greater attention to the educational needs of nonmetro poor and minority groups seems strong.

### Higher-Level Skills

The emphasis on basic skills may have had an unintended (and undesired) side effect, according to several researchers who have examined all levels of performance among elementary and secondary students. According to one source, "NAEP findings indicate that students are mastering the basics, while doing worse on more difficult aspects of the same subject."<sup>2</sup> (Personal communication: NIE, 1981 (draft)) It appears that students can handle mathematical computations and English grammar but flounder on word problems and persuasive writing. They are doing better on literal comprehension but worse on inferential comprehension. The poor performance of high school students on science and social studies, one author argues, "reinforces the need for high schools... to expand their focus" beyond basic reading and math."<sup>3</sup>

The pattern shows up when age is used as a variable. Between 1970 and 1980, nine-year olds improved the most of any group. Thirteen year olds were essentially stable and showed a few improvements. Seventeen-year-olds, however, declined in performance during the decade.

If this problem is more severe for nonmetro students, it could be related to course offerings in rural and small schools. Higher-level skills in math, science, and foreign languages are typically taught in the advanced forms of those subjects. If rural and small schools cannot offer the subjects, they are hard pressed to expose students to the skills they teach.



## V. STUDENT EXPERIENCES AS REPORTED BY RURAL SENIORS

Like other important social institutions, schools acquire images. Since at least the advent of reformers' enthusiasm for school consolidation, rural schools have (in the minds of both reformers and supporters) taken on characteristics so pronounced as to constitute an image based on a set of conventional beliefs that have accrued over the years. To the early reformers, rural schools were too small and too provincial to provide an adequate curriculum or to function efficiently: making them into good schools would cost too much, so they needed to be joined with other schools. To supporters, on the other hand, rural schools were (and are) places where school spirit and extra-curricular participation are high, teachers are more personally acquainted with students, and school-community rapport is strong. Both sets of ideas have come to constitute some of the conventional wisdom about rural schools.

A National Center of Education Statistics (NCES) survey of high school seniors has provided an opportunity to test -- in a tentative sense -- some "conventional wisdom" assumptions against student reports and perceptions. In a High School Beyond Study in 1980, a national sample of high school seniors was asked to respond to 121 questions (most containing several items) about their experiences in high school. For this study, NCES has sorted the responses by geographic region and by urbanicity within region.

Forty-five items pertaining to academic classes and programs, special programs, extra-curricular activities, and school climate have been selected for examination in this report. These data will be presented as percentages by region and by urbanicity. It must be kept in mind that the scope of this study did not provide for statistical tests of differences among categories of students and that all subsequent discussion focuses only on differences in percents. With those limitations or a caution, however, one can see a few patterns in the way rural and non-rural students answered questions about their classes, teachers, and schools.

### Curricular Offerings

A part of the conventional wisdom about rural schools is that their smaller size and isolation from urban centers inhibit their ability to provide a full and diversified curriculum, thus limiting their students' opportunities to get an education that has high quality and is matched with the needs of diverse individuals. In the past, detractors cited this characteristic as a reason for closing small rural schools and sending students to consolidated ones. Today, many of those who have studied rural education conditions would cite this feature (assuming its existence) as an indication of inequity, pointing out that people who inhabit sparsely settled places or small communities ought not necessarily be forced into losing their schools because of where they live. Recent critics of consolidation have also raised questions about the greater cost efficiency of larger schools. The question of equity as

it relates to rural and urban cost differences in a complex one and should be the subject of a major national study. Even in the absence of such a study, some evidence about the correctness of the conventional wisdom is warranted. Is it true that rural schools on the whole do not offer the range or extent of course offerings provided in urban and suburban schools?

### Advanced Academic Offerings

Data from the High School and Beyond Study of seniors suggest ~~that~~ that, with respect to more advanced academic offerings, the answer is yes, it is true -- in most cases. Nine items from three of the questions have been selected in order to compare urban, suburban, and rural differences in the experiences that high school seniors reported during the three year beginning 1977-78 to 1979-80. These items are academic courses in math, science, Spanish, French, German, advanced English, and advanced math; frequency of writing assignments; and student ratings of their schools' academic instruction.

It must be kept in mind that the data are student responses to questions about instruction and not administrators' listings of what the schools offer. An assumption is being made, however, that differences in students' participation in advanced classes are more likely to be a reflection of what is available than a statement about differences among urban, suburban, and rural students. (The data on student participation in subject matter and honorary clubs seem to support this assumption.

See pp \_\_\_\_.) With this caution in mind, it is possible to make a few general observations about the data in tables 1 through 9.

Type of High School Program. In every census region, fewer rural than urban or suburban seniors reported being in an academic program. (Table V-1) Regional differences, however, were more dramatic than differences in urbanicity, with Northeastern students in all types of schools reporting higher enrollments in academic programs than other students, regardless of setting. Almost half (48.9 percent) of suburban students in the Northeast were in this type of program, compared with fewer than one-third in the suburban South (31.28 percent) and the suburban West (32.70 percent). The Midwest stands close to midway between the Northeast and West, with 39.59 percent. For rural students, the figures were 41.45 percent for the Northeast, 27.22 percent for the South, 27.08 percent for the Midwest, and 26.25 percent for the West.

Table V-1

**1980 Seniors Enrolled in General, Academic, and Vocational  
Programs by Urbanicity and Region**

Type of High School Program	General	Academic or College Preparatory	Agriculture Occupations	Business or Office Occupations	Distributive Education	Health Occupations	Home Economics Occupations	Technical Occupations	Trade or Industrial Occupations	Total Vocational Occupations
<b>Urban</b>										
Northeast	21.66	43.02	2.26	15.03	1.45	1.10	1.48	1.45	7.55	30.32
South	36.13	30.92	3.53	10.80	4.74	1.31	2.63	1.92	8.04	32.95
Midwest	37.32	28.88	1.80	13.43	2.55	1.99	1.75	3.98	8.30	33.80
West	43.76	34.02	1.14	9.41	.56	1.74	1.47	1.78	6.11	22.22
<b>Suburban</b>										
Northeast	24.99	48.59	1.93	11.74	1.83	1.01	.69	2.60	6.62	26.42
South	39.71	31.28	3.47	10.40	3.92	1.27	1.84	2.81	5.29	29.01
Midwest	36.73	39.59	2.64	7.94	2.37	1.08	1.34	2.02	6.29	23.68
West	47.52	32.70	1.83	7.94	1.09	1.22	1.05	2.32	4.34	17.98
<b>Rural</b>										
Northeast	30.94	41.45	1.28	12.81	1.10	.64	1.22	2.01	8.55	27.61
South	43.41	27.22	4.75	10.59	.91	1.30	2.13	1.85	5.85	29.37
Midwest	49.32	27.08	4.94	7.24	1.61	1.34	1.04	1.64	5.78	23.60
West	49.52	26.25	3.42	10.01	2.05	0.62	0.66	2.70	4.77	24.23

Except in the West, more urban than rural students said they were taking a vocational program. The difference between urban and rural students in the Midwest is more than ten percent (33.80 percent to 23.60 percent) but is less striking in the other regions. The West has a quite different sorting, with more rural (24.23 percent) than urban (22.22 percent) or suburban (17.98 percent) students reporting enrollment in a vocational program.

More than 43 percent of all rural students in the South, Midwest, and West said they were in the general program. Almost half the rural students in the Midwest (49.33 percent) and the West (49.52 percent) claimed to be taking a general high school course. Only about 31 percent of Northeastern rural students made this claim, however.

Math and Science. Three or more years of high-school math and science are generally required for entrance to college programs in prestigious fields like engineering, pre-medicine, and the physical and biological sciences. A school's student rate of enrollment in science and math classes is one indication of its graduates' opportunities to pursue college study in a mathematical or scientific field. The data from the NCES Senior Questionnaire show that in all census regions, fewer rural than urban or suburban students report taking 3 or more years of math in senior high school.

Table V-2

1980 Seniors Ranked by Percent in Region (By Urbanicity) With Three or More Years of Math

<u>Rank</u>	<u>Percent</u>	<u>Region and Urbanicity Status</u>
1.	48.15	Urban Northeast
2.	45.70	Suburban Northeast
3.	45.09	Rural Northeast
4.	32.76	Suburban South
5.	32.24	Urban South
6.	30.61	Urban Midwest
7.	28.51	Suburban Midwest
8.	27.32	Rural South
9.	23.59	Suburban West
10.	22.68	Rural Midwest
11.	22.53	Urban West
12.	19.6	Rural West

The best predictor on this variable, however, is not type of setting but census region. More than forty-five percent of all Northeastern students reported studying math for at least three years. No other region or setting came within 12 points of the lowest figure for the Northeast. Rural Southern seniors with three or more years of math outranked all types of Western seniors as well as rural Midwestern seniors. Seniors in the rural West reported the least participation, 19.6 percent.

These figures say nothing, of course, about the type of mathematics classes students had taken. It is entirely possible that some students had taken general math, business math, and pre-algebra, while others had taken advanced algebra, trigonometry, and calculus. The same things is true of science courses. One student's three years of science might consist of two years of chemistry and one of physics, while another's might be general science, physical science, and biology.

Table V-3

1980 Seniors Ranked by Percent in Region (by  
Urbanicity) With Three or More Years of Science

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	41.49	Urban Northeast
2.	35.11	Rural Northeast
3.	33.78	Suburban Northeast
4.	21.24	Suburban Midwest
5.	19.90	Urban South
6.	19.19	Rural Midwest
7.	19.05	Suburban South
8.	17.18	Rural South
9.	16.99	Urban Midwest
10.	14.68	Rural West
11.	13.35	Suburban West
12.	12.52	Urban West

Rural students compared more favorably with their urban and suburban counterparts when asked how many years of science they had taken. Only in the South did rural students lag the pack; in the West, they led. In the Northeast, more rural (35.11 percent) than urban students (33.78 percent) said they had taken three or more years of science. In the Midwest, 19.19 percent of rural students but only 16.99 percent of urban students so reported. Once more, however, the gap between the Northeast and the other regions looks substantial. The lowest Northeast rate of 33.78 percent is more than 12 points higher than the rate for the highest participating group in the rest of the country. There is a spread of almost thirty points (41.49 percent to 12.52 percent) between urban Northeastern students reporting 3 or more years of science and urban Western students so reporting.

Foreign Languages. High School seniors in the High School and Beyond Study were asked to state how many years of Spanish, French, or German



they had taken since entering the tenth grade. From their responses, it appears that Spanish is the most frequent choice of students who elect a foreign language and that, for Spanish and French, attending school in the Northeast is the best predictor of taking at least three years of a language. Three years or more of a foreign language were chosen as the variable to examine because three years' study of a language in high school is usually considered the minimal requirement for literacy. If this is the case, very small minorities of high school seniors throughout the United States were potentially literate in a foreign language in 1981.

This was especially true for students outside the Northeast (with only two exceptions); more so for rural students in the South, Midwest, and West; and notably so for all students in the German language. Tables V-4, V-5, and V-6 show by rank from greatest to least the percentage of students having taken three or more years of one of the languages.

Table V-4

1980 Seniors Ranked by Percent in Region (by  
Urbanicity) With Three or More Years of Spanish  
More Than Three Years

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	8.19	Urban Northeast
2.	4.99	Suburban Northeast
3.	3.34	Rural Northeast
4.	3.05	Urban Midwest
5.	2.78	Urban West
6.	2.75	Suburban West
7.	2.61	Suburban Midwest
8.	1.91	Rural West
9.	1.58	Urban South
10.	1.56	Suburban South
11.	1.54	Rural Midwest
12.	1.43	Rural South

### Three Years Plus More Than Three Years

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	10.29	Urban Northeast
2.	6.46	Suburban Northeast
3.	3.7	Urban Midwest
4.	3.73	Suburban West
5.	3.68	Urban West
6.	3.67	Suburban Midwest
7.	3.62	Rural Northeast
8.	2.36	Rural West
9.	2.09	Urban South
10.	2.06	Suburban South
11.	1.93	Rural Midwest
12.	1.73	Rural South

The Northeast substantially outdistances all other regions on the percentage of students studying Spanish, with about eleven percent. (See table V-4) Urban Northeastern students exceeded their rural counterparts, however, by 7.37 percent -- almost three to one. Other rural-urban differences were much slighter, but rural students were never ahead on percentages.

Only in the Northeast did any group of students reporting 3 or more years of French reach two percent or more. Rural Northeastern students outdistanced their urban counterparts, at 4.37 percent to 3.64 percent. Urban Midwestern students with three or more years of the language were only 1.96 percent but were the greatest percentage of any group outside the Northeast. The lowest group was rural students in the West, with only 0.41 percent reporting three or more years of study.

Table V-5

1980 Seniors Ranked by Percent in Region (by  
Urbanicity) With Three or More Years of French  
Three Years or More

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	4.30	Suburban Northeast
2.	2.92	Rural Northeast
3.	2.55	Urban Northeast
4.	2.13	Suburban Midwest
5.	1.58	Urban Midwest
6.	1.34	Suburban West
7.	1.29	Suburban South
8.	1.26	Urban South*
9.	0.87	Urban South*
10.	0.77	Rural Midwest
11.	0.67	Rural South
12.	0.09	Rural West

3 and 3 1/2 More Years of Spanish  
Three Years Plus More Than Three Years

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	4.94	Suburban Northeast
2.	4.37	Rural Northeast
3.	3.64	Suburban Northeast
4.	2.76	Suburban Midwest
5.	1.96	Urban Midwest
6.	1.84	Suburban West
7.	1.63	Suburban South
8.	1.27	Urban South
9.	1.26	Urban West
10.	1.06	Rural Midwest
11.	0.77	Rural South
12.	0.41	Rural West

The German language did not appear to be studied much at all in U.S. high schools in 1980. As Table V-6 shows, the largest percentage of students with three or more years of German was 2.06 (in the suburban Northeast), compared with almost 11 percent for Spanish and 4.37 percent for French. In urban and rural groups, only in the rural Northeast, rural West, and urban Midwest did the percent of students reporting extensive study exceed one percent: 1.79 percent for the first, 1.62

percent for the second, and 1.49 percent for the third. Students in the rural south had least exposure (0.29) percent to several years of the German language. Small as the percentages are, German is the only instance of a language that in two regions of the country is studied in depth by greater proportions of rural than urban students, and in which the urban Midwest outdistanced all other urban regions. One is tempted to see in this pattern the continuing effects of 19th century German settlement, which tended to be in rural areas, particularly in the upper Midwest and Great Plains states. Today these areas have many enduring German communities.

Table V-6

1980 Seniors Ranked by Percent in Region (by  
Urbanicity) With Three or More Years of German  
More Than Three Years

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	1.76	Suburban Northeast
2.	1.41	Urban Midwest
3.	1.37	Rural West
4.	1.23	Suburban Midwest
5.	1.08	Rural Northeast
6.	0.62	Rural Midwest
7.	0.55	Suburban West
8.	0.42	Suburban South
9.	0.35	Urban West
10.	0.35	Urban South
11.	0.27	Urban Northeast
12.	0.21	Rural South

### Three Years Plus More Than Three Years

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	2.06	Suburban Northeast
2.	1.76	Rural Northeast
3.	1.62	Rural West
4.	1.62	Suburban Midwest
5.	1.49	Urban Midwest
6.	.98	Suburban West
7.	.70	Rural Midwest
8.	.63	Suburban South
9.	.44	Urban South
10.	.35	Urban West
11.	.29	Rural South
12.	.24	Urban Northeast

One might also suspect that bilingual students in French-speaking areas of Maine help to account for the fact that a higher proportion of Northeastern rural than urban students reported three or more years of French. Given the large Hispanic population in the United States, it seems logical that Spanish was the most popular foreign language for high school students in the survey. What is surprising is that more students did not study it extensively, particularly in the West, which reported extensive study for 3.73 percent of suburban students, 3.68 percent of urban students, and only 2.36 percent of rural students.

### Advanced or Honors English and Math.

Most schools have some students who both excel and are very interested in English or math; and many schools offer advanced placement courses in these subjects so that outstanding students may be challenged and perhaps enter college with advanced standing. It seems reasonable to assume that approximately the same proportion of rural, urban suburban

students would have this interest or ability. But does rural students' participation equal that of their urban and suburban counterparts? Student responses to the NCES questionnaire indicates that it does not, particularly in English.

Table V-7  
1980 Seniors Ranked by Percent in Region by Urbanicity  
Having Taken Advanced or Honors Math and English

<u>Advanced or Honors English</u>			<u>Advanced or Honors Math</u>		
<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>	<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	30.61	Urban Northeast	1.	24.93	Urban Midwest
2.	30.19	Suburban West	2.	24.32	Urban Northeast
3.	30.08	Urban Midwest	3.	23.98	Suburban Northeast
4.	29.59	Urban West	4.	23.56	Urban West
5.	27.86	Suburban South	5.	23.03	Suburban Midwest
6.	26.28	Urban South	6.	22.84	Rural Midwest
7.	26.27	Suburban Northeast	7.	22.48	Suburban South
8.	26.13	Rural West	8.	21.46	Rural Northeast
9.	25.31	Suburban Midwest	9.	21.04	Urban South
10.	23.46	Rural Midwest	10.	20.96	Suburban West
11.	22.35	Rural South	11.	19.79	Rural South
12.	21.52	Rural Northeast	12.	19.67	Rural West

When students are ranked by proportion taking (or having taken) advanced or honors English classes, the lowest three groups answering "yes" were in the rural Northeast (21.52 percent), the rural South (22.35 percent), and the rural Midwest (23.46 percent). Students in the rural West outranked students in the suburban Midwest and all other rural students, but still ranked only 8 on the list. Since the range of students reporting advanced English was from 21.52 percent to 30.61 percent, 26.5 percent is an approximate median. No group of rural seniors attained that mark, with seniors in the rural West (26.13 percent) coming closest. Rural-urban differences look substantial: -9.09 points in the Northeast, -4.03 for the South, -6.62 points for the Midwest, and -3.46 for the West.

Table V-8

Percent of 1980  
Rural and Urban Seniors Having Taken Advanced  
or Honors English Classes

Advanced Percent Honors English

<u>Region</u>	<u>Rural</u>	<u>Urban</u>	<u>Differences</u>
Northeast	21.52	30.61	-9.09
South	22.35	26.28	-4.03
Midwest	23.46	30.08	-6.62
West	26.13	29.59	-3.46

Advanced or Honors Math

<u>Region</u>	<u>Rural</u>	<u>Urban</u>	<u>Differences</u>
Northeast	21.46	24.31	-2.86
South	19.79	21.04	-1.25
Midwest	22.84	24.93	-2.09
West	19.67	23.56	-3.89

In advanced or honors math, rural students had a little better performance, with the rural Midwest ranking 6th and the rural Northeast ranking 8th. The rural South and West, however, ranked 11th and 12th. On this variable the spread in percentage points was only 5.26, so that when urban and rural students are compared, the differences are smaller for math than for English. The only region with more than 3 points difference between rural and urban students was the West.

Writing assignments. The ability to write clear sentences, paragraphs, and themes is crucial for college performance and essential for many jobs and careers. Practice in writing is widely held to be necessary for building writing skills. There is, nevertheless, substantial variation in the amount of writing assignments students reported in the survey. In general rural students were most likely of all groups to check "seldom" or "never" when asked how often they were assigned to write essays, themes, poetry, or stories. With one exception (the Northeast, where urban was .04 points lower than rural), rural students in fewest proportion checked "frequently" when asked this question. (Table V-9) The greatest proportion of students in the Midwest (almost forty-five percent) reported that they wrote for class seldom or never, and the fewest proportion of these students (23.4 percent) said that they wrote frequently.



Table V-9

Percent of 1980 Seniors Reporting Writing Assignments as Seldom,  
Never, or Frequently by Region and Urbanicity

Seldom or Never

<u>Region</u>	<u>Urban</u>	<u>Suburban</u>	<u>Rural</u>	<u>All Students</u>
Northeast	30.57	33.54	34.47	33.21
South	31.50	34.61	38.73	32.55
Midwest	42.23	42.98	48.62	44.87
West	40.39	39.52	43.26	40.59

Frequently

<u>Region</u>	<u>Urban</u>	<u>Suburban</u>	<u>Rural</u>	<u>All Students</u>
Northeast	28.84	30.69	28.88	29.91
South	31.00	29.17	26.77	28.59
Midwest	24.81	25.61	19.15	23.14
West	26.49	28.43	23.84	26.95

The greatest differences within regions on combined "seldom" and or "never" response were in the South, with more than 7 points difference between rural and urban students; and in the Midwest, with more than 6 points difference between the same groups. "Seldom or never" responses ranged from a low of 30.57 in the urban Northeast to a high of 48.62 in the rural Midwest -- a difference of more than 18 points. "Frequently" responses ranged from a high of 31 in the urban South to a low of 19.15 in the rural Midwest.

Student Ratings of Academic Instruction. Students were asked to describe the general quality of academic instruction in their schools as poor, fair, good, or excellent, with an opportunity to check "don't know." The vast majority of students -- roughly 80 percent across the

Board -- checked either "fair" or "good." But the responses at the extremes are interesting for those who have studied rural schools and wondered how frequently they achieve outstanding quality or flounder in their attempts to educate students. Keeping in mind that this survey is only about how students report on their school experiences, a look at the responses on "poor" and "excellent" academic instruction shows that the pattern is unvarying in every census region: rural students least frequently described their instruction as "excellent" and most frequently rated it as "poor." On "excellent," the range was from 15.80 percent for urban Northeastern students to 9.55 percent for rural Western students. On "poor," the range was from 4.18 percent in the urban South to 9.74 percent of the rural South. In this region, rural seniors were more than twice as likely as urban seniors to call their instruction "poor." And on this item generally, rural and non-rural differences were greater than were differences among regions.

Table V-10

Percent of 1980 Seniors Rating Academic Instruction  
Good, Excellent, or Poor by Region and Urbanicity

<u>Good and Excellent Ratings</u>				
<u>Region</u>	<u>Urban</u>	<u>Suburban</u>	<u>Rural</u>	<u>All Students</u>
Northeast	15.80	12.59	10.83	12.76
South	14.47	12.52	9.68	11.79
Midwest	10.72	12.32	9.64	11.06
West	13.14	12.25	9.55	11.79

Poor Ratings  
Students Rating Academic Instructions "Poor"

<u>Region</u>	<u>Urban</u>	<u>Suburban</u>	<u>Rural</u>	<u>All Students</u>
Northeast	5.06	5.33	6.45	5.54
South	4.18	5.86	9.74	7.05
Midwest	5.77	5.65	7.15	6.21
West	4.78	4.92	5.63	5.06

Summary

There was substantial variation in how urban, suburban, and rural seniors described their academic coursework and the quality of their academic instruction in the 1981 High School and Beyond Study. On most items, however, there was more variation among regions than between rural and non-rural students. Students in the Northeast, regardless of school location, reported more years of math, science, French, and Spanish than any other group. Greater percentages of Northeastern than other students described their academic instruction as "excellent," and fewest percentages labeled it "poor." These students were reportedly enrolled in academic programs for more frequently than any other students.

Rural students in the South, Midwest, and West were less likely than their urban and suburban counterparts to take three years of math, Spanish, and French. This was also the case for science, except in the West. Nationally, very few students reported three years' study of German; of those who did, rural students in the Northeast and West outdistanced most other groups.

In advanced English, all rural seniors and suburban Midwest seniors were least likely to report enrollment. Rural Southern and Western students reported enrollment in advanced or honors math less frequently than all other students. Rural Midwestern and Northeastern students outranked several other groups on this item, however. Rural students as a whole reported most frequently that they were given writing assignments "never or seldom." They reported writing frequently less often than urban and suburban students.

In all regions, rural seniors were least likely of all groups to say their academic instruction was excellent, and most likely to describe it as poor. Urban students in general rated their instruction higher than rural or suburban students.

#### Vocational and Technical Programs

Items from two questions in the High School and Beyond Survey were selected for the purpose of comparing how rural and other students in vocational or technical programs described their preparation. Question 4 in the survey asked students to check the number of years had they taken classes in particular subjects. From the list, trade and industry and technical fields were chosen. Question 6 asked students to indicate whether or not they felt equipped for a job in any one of several fields. From the list, four fields were selected: agriculture, auto mechanics, commercial arts, and computer programming or operations.

Except in the West, fewer percentages of rural than urban students reported enrollment in vocational programs. Participation was about the same as greater, however, when rural and suburban students were compared -- between 23.60 and 29.37 percent for all rural students, and between 17.99 and 29.01 percent for all suburban students. The range for urban students was from 22.22 to 33.80. The percentages of students reporting enrollment in several occupations appears below.

Table V-11

Percent of 1980 Seniors Participating in Selected Vocational Programs By Region and Urbanicity

<u>Region</u>	<u>Urban</u>	<u>Suburban</u>	<u>Rural</u>
Percent			
<u>Trade or Industrial Occupations</u>			
Northeast	7.55	6.62	8.55
South	8.04	5.29	5.85
Midwest	8.39	6.29	5.78
West	6.11	4.34	4.77
<u>Technical Occupations</u>			
Northeast	1.45	2.60	2.01
South	1.92	2.81	1.85
Midwest	3.98	2.02	1.64
West	1.78	2.32	2.70
<u>Agricultural Occupations</u>			
Northeast	2.26	1.93	30.94
South	3.53	3.47	43.41
Midwest	1.80	2.64	49.32
West	1.14	1.83	49.52

Generally suburban students reported the fewest percentages of enrollment in trade or industrial occupations, although this was not true for the Midwest. Greatest reported enrollment in technical programs was

in the urban Midwest, the rural West, all suburban places, and the rural Northeast. In all other places it was reportedly less than 2 percent. Agriculture, as one would expect, is the great divider; rural Western student enrollment exceeded that of urban Western students by more than 43 to 1 (the most extreme case), and all rural-urban differences were at least as great as 13.7 to 1.

In two of the three fields -- trade or industry and technical education -- data here available on the percentages of students with 3 or more years of coursework:

Table V-12

1980 Seniors Ranked by Percent in Region (by Urbanicity)  
With Three or More Years of Trade and Industrial Courses

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	6.41	Urban Northeast
2.	6.38	Rural Northeast
3.	5.96	Urban West
4.	5.87	Suburban Northeast
5.	5.59	Rural West
6.	5.25	Urban Midwest
7.	4.92	Urban South
8.	4.72	Rural Midwest
9.	4.37	Suburban West
10.	3.60	Suburban Midwest
11.	3.22	Suburban South
12.	3.20	Rural South

Table V-13

1980 Seniors Ranked by Percent in Region (by  
Urbanicity) With Three or More Years of Technical Courses

## Rank-Technical (3 years)

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	5.30	Rural Northeast
2.	4.74	Urban Midwest
3.	4.56	Suburban Northeast
4.	4.40	Urban Northeast
5.	4.05	Rural West
6.	3.26	Rural Midwest
7.	2.96	Urban West
8.	2.91	Suburban West
9.	2.90	Urban South
10.	2.75	Suburban South
11.	2.08	Suburban Midwest
12.	1.66	Rural South

In percent of students with 3 years of coursework in trade or industry, rural students ranked 2 (Northeast: 6.38 percent); 5 (West: 5.59 percent); 8 (Midwest: 4.72 percent); and 12 (South: 3.20 percent). Rural students with 3 or more years of technical education ranked somewhat higher. Rural students in the Northeast ranked 1 (5.30 percent), in the West 5 (4.05 percent) in the Midwest 6 (3.26 percent), and in the South 12 (1.66 percent). Students in the urban and suburban South ranked lower than all others except those in the suburban Midwest and the rural South.

Seniors in the survey were given a list of vocational subjects and asked, "Have you taken any high school courses in the following areas which have equipped you for a beginning job in that area?"

Rural students reported far greater preparation for jobs in agriculture than did any other group, with the exception of Northeastern students, who had fewer "yes" responses than any group except their Northeastern urban counterparts. More than 16 percent of rural Midwestern students and almost fifteen percent of rural Southern students indicated they had taken agricultural courses equipping them for jobs; almost twelve percent of rural students in the West said the same. Substantial percentages of suburban Southern and Western students also responded positively to this question, 10.75 and 10.14 percent, respectively. All other groups of students were in the range of 6.90 percent to 3.62 percent.



Table V-14

1980 Seniors Ranked by Percent in Region (by Urbanicity) With  
Three or More Years in Selected Vocational Programs

Agriculture

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	16.08	Rural Midwest
2.	14.70	Rural South
3.	11.83	Rural West
4.	10.75	Suburban South
5.	10.14	Suburban West
6.	6.90	Suburban Midwest
7.	5.62	Urban South
8.	5.20	Urban West
9.	4.84	Urban Midwest
10.	4.28	Suburban Northeast
11.	4.08	Rural Northeast
12.	3.62	Urban Northeast

Auto Mechanics

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	18.76	Rural West
2.	18.50	Suburban West
3.	18.20	Rural Midwest
4.	10.07	Urban West
5.	14.14	Suburban Midwest
6.	11.72	Urban Midwest
7.	9.81	Rural South
8.	9.65	Suburban Northeast
9.	8.38	Rural Northeast
10.	7.95	Urban Northeast
11.	7.63	Suburban South
12.	6.36	Urban South

Commercial Arts

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	23.98	Rural West
2.	22.65	Urban West
3.	20.41	Suburban West
4.	19.66	Rural Midwest
5.	18.86	Urban Northeast
6.	16.26	Suburban Midwest
7.	14.92	Suburban South
8.	14.50	Urban Midwest
9.	14.41	Urban South
10.	14.23	Suburban Northeast
11.	12.72	Rural South
12.	12.59	Rural Northeast

% Computer Programming or Objectives

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	18.41	Urban Northeast
2.	17.41	Urban Midwest
3.	16.96	Suburban Northwest
4.	15.33	Urban West
5.	13.81	Suburban Midwest
6.	12.73	Suburban South
7.	11.84	Suburban West
8.	12.58	Rural Midwest
9.	10.88	Urban South
10.	10.38	Rural West
11.	10.04	Rural Northeast
12.	7.33	Rural South

In preparation for work in auto mechanics, two groups of rural students ranked in the top 3. Almost 19 percent of students in the rural West, and more than 18 percent of students in the rural Midwest, answered yes to this question. The rural South and Northeast had substantially lower percentages of 9.81 percent and 8.30 percent, respectively. On this item, region was the best predictor of being in the top half, with all groups so ranked being in the West and Midwest. Percentages of Southern and Northeastern students who answered "yes" to this question ranged from 9.81 in the rural South to 6.36 in the urban South.

More students in the West reported job preparation in commercial arts than did any other group, with rural students topping the list at almost 24 percent. Rural Midwestern students ranked 4th, with almost 20 percent. With fewer than 12 percent "yes" responses, rural Southern and Northeastern students held the lowest two ranks on the item.

With one exception, rural students brought up the rear in perceived preparation for jobs in computer programming or operations, and the other group of rural seniors was not far ahead of them. Rural students' responses of "yes" to this question were 7.33 in the South, 10.04 in the Northeast, 10.38 in the West, and 12.58 in the Midwest. On the other hand, students in the urban Northeast (18.41 percent), urban Midwest (17.41 percent) suburban Northeast (16.96 percent), and urban West (15.33) had considerably greater percentages of "yes" replies.

### Other Selected Curricular Offerings

For at least a decade, communities and educators throughout the United States have been concerned about increasing rates of teenage pregnancies and substance abuse among the young. There has been some controversy about schools being the most appropriate provider of instruction on these subjects, but in many places throughout the nation schools are viewed as having some responsibility for teaching students to be responsible about their health and their relationships with other people. In the High School and Beyond Study, seniors were asked to indicate whether or not they had taken classes in family life or sex education and in alcohol or drug abuse education. The results are displayed in table V-15 below.

Table V-15

Percent of Students Enrolled in Family life and  
Substance Abuse Programs, by Region and Urbanicity

<u>Region</u>	<u>Urban</u>	<u>Suburban</u>	<u>Rural</u>	<u>Total</u>
<u>Percent</u> <u>Family Life or Sex Education</u>				
Northeast	56.13	53.74	47.00	52.57
South	40.01	34.57	37.97	36.97
Midwest	43.44	51.58	50.76	49.76
West	58.80	58.32	46.79	55.67
<u>Alcohol or Drug Abuse Education</u>				
Northeast	45.50	52.22	41.08	48.29
South	30.26	29.61	28.70	29.38
Midwest	36.28	41.08	34.81	37.93
West	44.58	47.76	43.70	46.15

Almost 56 percent of students in the West said they had taken a family life or sex education course, but only about 47 percent of rural Western students so reported. They lagged their urban counterparts by twelve percent and their suburban counterparts by almost as much. In the Northeast, 52.57 percent of all students answered "yes" to this question, with rural students lagging urban and suburban students by almost 9 percent and nearly 7 percent, respectively. In the Midwest, where almost 50 percent of students reported taking family life courses, rural students (50.76 percent) were ahead of urban students (43.44 percent). Rural students in the South (37.97 percent) led students in the Southern suburbs (34.78 percent). Only 36.97 percent of all Southern seniors answered "yes" to this question, less than two-thirds as many as Western seniors who said "yes."

Students claiming enrollment in a program on drug or alcohol abuse program ranged from 28.70 percent in the rural South to 52.22 in the Northeastern suburbs. In every region, rural students lagged other students, with the greatest difference in the Northeast. Northeastern rural students lagged Northeastern suburban students by about 11 points (41.08 percent to 52.22 percent), while in the South the rural-suburban difference was only about 1 point. Participation of both rural and suburban southern students was considerably less than in the Northeast, (28.70 percent and 29.61 percent, respectively). Other rural and non-rural differences on this item ranged from just over 1 percent to more than 6 percent.

## Summary

If these vocational and "other" courses and programs could be viewed as some sort of litmus test for rural and non-rural differences, the conclusions would confirm the conventional wisdom that rural students in general are less likely to be exposed to a full and diversified curriculum. They are not a litmus test, of course, and the data on these subjects alone do not warrant such a conclusion. The thread running through the fabric of combined data on academic, vocational, and other courses, however, is that rural students were taking fewer of the programs and courses thought to lead to further education and the better jobs than were other students. In general, they lagged other students in percentages taking math, science, and advanced English, Spanish, and French classes. They lagged in technical fields like computer programming, and on the whole they were less likely than other students to take courses reflecting society's concern for teenage health and social behavior. As a group, rural students most often rated their academic instruction "poor" and least often labeled it "excellent."

Rural students in the Northeast, however, reported generally far greater experience with advanced academic and technical offerings than other rural students; it was not uncommon for them to surpass the urban and suburban students of other regions. Overall, Southern rural students reported the lowest participation in advanced classes (with the notable exception of agriculture), and presented some of the extreme cases of differences from urban and suburban counterparts. After the South,

students in the rural West reported some of the lowest participation in advanced offerings, although they were among the front runners in a few instances.

While the conventional wisdom about fewer courses and programs for rural students appears partly confirmed in the responses of students to questions about their academic experiences, there is another difference of equal significance. Regional responses to this survey were sometimes as varied (or more so) than were responses based on urbanicity. The extreme case of greater academic participation was in the Northeast, the reverse was in the South. There were exceptions, of course; but the general pattern reflects regional differences that have long been present in education.

Combined rural and regional differences suggest that a monolithic rural education policy would be ill-advised. Many of the educational shortcomings of the rural South for example, are associated with high instances of poverty. In the West and Midwest, the smaller size of rural schools and distances from urban centers may have presented problems in service delivery that are not yet solved. Northeastern students of all types seem to be the beneficiaries of a historical regional emphasis upon education and intellectual pursuits; but the rural students in that region who are not receiving an adequate range of courses may be a small minority for whom it is hard to get attention. Clearly, rural and non-rural differences cannot be viewed apart from regional differences.

## Special Programs

Do rural students have equal opportunities to participate in appropriate special programs? The conventional wisdom says no. Since the late 1960s, education policy in the United States has advocated providing appropriate services for students who are poor or culturally and/or linguistically different from other students. Throughout the past decade and a half, considerable attention has been directed to education in large cities, which were thought to have the greatest proportions and numbers of these students. In absolute numbers, of course, they did; and the attention given to urban education was (and is) entirely merited.

So would be appropriate attention to rural education in this regard. Rural areas, particularly in the South and West, also have large minority and poor student populations. In recent decades, however, one did not hear so much or read so much about the problems of rural minorities or the rural poor. Until Frank Fratoe's two landmark studies of the education of rural Blacks and rural Hispanics were published in recent years, there was little national data on the education status of rural minorities.

The NCES study, however, has provided an opportunity to examine how rural students compare with other students on participation in programs for students with special needs. Seven special programs have been selected from the NCES survey for discussion in this report.

Bilingual Education Bilingual programs are intended to benefit students with a need to know more than one language. Hispanic students whose first language is not English, for example, are taught in Spanish until they know enough English to function in classes taught in that language. In some places, it is thought advantageous for English speaking children to learn the other language prominent in the region, and they, too, are enrolled in bilingual classes. In high school, however, most students study second languages in foreign language classes. Although bilingual students speak a wide range of languages, Spanish is the language, after English, most often spoken in the United States. One would therefore expect to find more bilingual programs where there are concentrations of Spanish-speaking populations: The West, the Florida peninsula, and parts of the Northeast. Table V-16 below indicates, by rank from greatest to least, the percent of students reporting enrollment in bilingual programs.

Table V-16

1980 Seniors Ranked by Percent in Region (by Urbanicity)  
Reporting Participation In Bilingual Education Programs

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	17.80	Suburban Northeast
2.	16.67	Urban West
3.	15.08	Suburban West
4.	13.10	Rural Northeast
5.	11.96	Rural West
6.	11.90	Urban Midwest
7.	11.87	Urban Northeast
8.	11.24	Suburban West
9.	10.59	Suburban South
10.	9.50	Rural Midwest
11.	8.86	Urban South
12.	7.84	Rural South



Almost 18 percent of suburban Northeastern students claimed enrollment in a bilingual program, as did close to 17 percent of students in the Urban West. In the rural West, just under 12 percent of students reported participation, compared with 13.10 percent in the rural Northeast. Almost 72 percent of urban Northeastern students reported being in bilingual programs. Students in the rural and urban South and the rural Midwest had the lowest rates of participation: 7.84 percent, 8.86 percent, and 9.5 percent, respectively. Except in the West, fewer rural than urban or suburban students said they had been in bilingual programs; and the percentage for the suburban West was only .09 percent lower than for the rural group.

CETA: The Comprehensive Employment Training Act (CETA) contains programs for in-school youth who need job training and income. It was especially intended to help low-income youths with high drop-out potential. This being the case, one would expect to see about as many or more rural as other students participating in CETA programs in the South and West, where minority rates of poverty in rural areas often exceed rates in urban areas.

Table V-16 indicates that for the South and West, this expectation holds -- more or less. Almost fourteen percent of rural Southern seniors, compared with 12.02 percent of seniors in the urban South, reported participation in CETA programs. In the West, 9.78 percent of rural students and 9.74 percent of urban students -- a negligible difference -- reported participation. In the Northeast and Midwest, rural students lagged their urban counterparts.

Table V-17

1980 Seniors Ranked by Percent in Region (by  
Urbanicity) Reporting Participation In CETA Programs

<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	13.91	Urban Midwest
2.	13.83	Rural South
3.	12.65	Urban Northeast
4.	12.02	Urban South
5.	9.78	Rural West
6.	9.74	Urban West
7.	9.17	Suburban South
8.	7.73	Suburban West
9.	7.32	Rural Midwest
10.	7.28	Suburban Northeast
11.	7.09	Rural Northeast
12.	5.12	Suburban Midwest

#### Talent Search and Upward Bound

Talent Search and Upward Bound are programs intended to benefit youths who in some way are so disadvantaged by circumstances that their talents might go undiscovered or undeveloped in the normal course of events. All other things being equal, one would expect to find high participation in these programs where minority and poor students are concentrated: the rural and urban South, the rural and urban West, and urban areas of the Northeast and Midwest.

Rural participation in Talent Search is greatest in the South (4.63 percent) and Northeast (4.40 percent). In both South and Northeast participation is greatest in urban schools. In the West and Midwest, rural participation-- except for Midwestern suburbs -- ranks the lowest in the nation and is less than 2 percent.

Table V-18

1980 Seniors Ranked by Percent in Region (by Urbanicity)  
Reporting Participation in Talent Search and Upward Bound Programs

<u>Talent Search</u>			<u>Upward Bound</u>		
<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>	<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	5.69	Urban Northeast	1.	2.96	Urban South
2.	5.61	Urban South	2.	2.72	Urban Northeast
3.	4.63	Rural South	3.	2.10	Rural South
4.	4.40	Rural Northeast	4.	1.83	Rural West
5.	3.60	Urban Midwest	5.	1.74	Urban West
6.	3.43	Suburban South	6.	1.65	Suburban South
7.	2.46	Suburban West	7.	1.61	Urban Midwest
8.	2.25	Suburban Northeast	8.	1.42	Rural Northeast
9.	2.05	Urban West	9.	0.99	Suburban West
10.	1.72	Rural Midwest	10.	0.81	Suburban Northeast
11.	1.65	Rural West	11.	0.76	Rural Midwest
12.	1.40	Suburban Midwest	12.	0.53	Suburban Midwest

In Upward Bound, rural participation was greatest in the South (2.10 percent), but in the Southern region urban students reported more frequent participation (2.96 percent). Students in the rural West reported 1.83 percent participation, greater than that of students in cities and suburbs. Rural Northeastern students had 1.42 percent Upward Bound participation, roughly half that of urban Northeastern students (2.72 percent). Only 0.76 percent of seniors in the rural Midwest reported Upward Bound experience; the only group below that percent was suburban Midwestern students (0.53 percent).

#### Special Vocational Programs

In the South, Midwest, and Northeast, rural students had lower rates of participation in Cooperative Vocational Education Programs than all other students in their regions. In the West, the reverse was true: rural students participated more frequently (8.27 percent) than did either suburban students (6.51 percent) or urban students (4.85 percent). Except in the South, no rural group ranked in the top half on rates of participation in the Cooperative Vocational Education Program.

Table V-19

1980 Seniors Ranked by Percent in Region (by Urbanicity)  
Reporting Enrollment in Selected Special Vocational Programs

<u>Co-Op Vocational Education Program</u>			<u>Vocational-Education Work Study Program</u>		
<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>	<u>Rank</u>	<u>Percent</u>	<u>Urbanicity and Region</u>
1.	14.93	Suburban Midwest	1.	18.07	Urban South
2.	14.54	Urban South	2.	17.91	Rural West
3.	14.19	Suburban South	3.	17.49	Rural South
4.	13.47	Urban Midwest	4.	16.35	Suburban South
5.	12.81	Rural South	5.	15.27	Suburban Midwest
6.	11.00	Urban Northeast	6.	14.58	Rural Midwest
7.	10.89	Rural Midwest	7.	12.90	Urban Midwest
8.	9.30	Suburban Northeast	8.	11.71	Suburban West
9.	8.27	Rural West	9.	11.53	Urban West
10.	8.12	Rural Northeast	10.	10.67	Rural Northeast
11.	6.51	Suburban West	11.	10.48	Urban Northeast
12.	4.85	Urban West	12.	9.86	Suburban Northeast

Rural students did better in both rank and rate of participation in Vocational Education Work-Study Programs. Students in the rural West (17.31 percent), South (17.49 percent), and Northeast (10.67 percent) led their regions in reported participation. Rural midwestern seniors (14.58 percent) were outranked by their suburban counterparts (15.27 percent) but not by urban Midwestern seniors (12.9 percent).

### Summary

It is not possible to say from these data whether or not rural students are participating equitably in the special programs discussed. Data on needs would have to be compared with data on participation if one were to draw conclusions about equity; and the former were not available for this study. The student responses to questions about participation in special programs do not suggest extreme rural and non-rural differences, however. Rather, the picture is mixed. It may be that, where special student populations are involved, rural schools in 1980 were in a position to do more than they could do about their academic programs. The federal nature of many special programs and the national response to minority demands of the 1960s may have given rural schools and their clients more opportunities to enroll their students in CETA programs, for example, than opportunities to expand their mathematics curriculum.

### Extra-Curricular Activities

If any one star outglows all others in the constellation of conventional beliefs about rural schools, it is the belief that more rural students than students of any other type have opportunities to participate in extra-curricular activities. If these belief is founded in fact, is by educational standards no trivial occurrence. Its meaning goes beyond the obvious fact that involvement in a range of activities can bring a wealth of knowledge and skills to the participant. The more salient characteristic cited by students of the rural scene is that smaller schools give more students opportunities to develop the skills of leadership. The more ardent supporters of small schools are not reluctant to point out how many Americans who have attained positions of national leadership came from rural places and small towns, where they had opportunities to practice and refine their leadership abilities.

But does this claim about greater rural participation have substance? It does indeed -- if students' responses to the High School and Beyond Survey of student participation in extra-curricular activities have validity. Out of 64 comparisons with urban and suburban students on questions about (1) participation in extra-curricular activities and (2) participation as leaders or officers, rural students led in 54 cases, or 84 percent of the time. On questions about leadership, they were ahead 81 percent of the time. In only one case were rural students last.

(in two)

Students were asked, on twelve items involving in-school activities, to indicate whether they had 1) not participated; 2) participated but not as leaders or officers, or 3) participated as leaders or officers. Their responses to 8 of these items on (2) and (3) are summarized in table V-20.



Table V-20 (A-H)

1980 Seniors Reporting Participation in Selected Extracurricular  
Activities by Region and Urbanicity

## A. Varsity Athletic Teams

<u>Participated But Not As Leader or Officer</u>				<u>Participated As Leader or Officer</u>			
Region	Urban	Suburban	Rural	Region	Urban	Suburban	Rural
Northeast	20.25	25.39	24.77	Northeast	9.49	12.76	14.26
South	17.33	18.79	19.92	South	9.90	12.19	14.38
Midwest	17.17	22.00	23.89	Midwest	11.82	13.72	17.25
West	18.67	20.93	24.27	West	9.25	11.50	18.98

## B. Cheer Leader, Pep Club, and Majorettes

Northeast	8.14	8.52	10.02	Northeast	2.53	3.20	3.66
South	10.83	11.52	15.03	South	4.28	4.72	5.42
Midwest	10.48	8.57	13.72	Midwest	3.68	3.17	6.35
West	9.28	8.49	13.51	West	4.82	3.54	5.34

## C. Debating or Drama

Northeast	10.15	10.37	13.69	Northeast	1.81	2.19	2.17
South	8.55	11.23	12.49	South	2.64	3.47	3.49
Midwest	7.98	9.16	12.74	Midwest	3.52	3.03	4.85
West	10.68	10.51	13.38	West	2.85	3.09	3.76

## D. Band or Orchestra

Northeast	8.29	9.95	12.29	Northeast	3.29	4.11	4.98
South	11.60	9.36	11.50	South	5.92	4.41	5.45
Midwest	9.47	11.55	15.82	Midwest	4.15	4.01	6.99
West	6.86	8.55	9.20	West	4.66	3.90	4.77

Participation in Extra Curricular Activities, Cont'd.

Participated But Not As Leader or Officer

Participated As Leader or Officer

Region Urban Suburban Rural

Region Urban Suburban Rural

E. Honorary Clubs

Northeast	13.52	13.27	14.06
South	13.44	15.72	17.04
Midwest	11.15	13.00	12.45
West	11.58	12.58	14.56

Northeast	2.50	1.98	2.06
South	3.54	3.73	3.96
Midwest	2.43	2.10	3.19
West	3.13	2.11	4.88

F. School Publications

Northeast	18.82	14.99	19.01
South	9.85	9.65	16.14
Midwest	10.36	11.23	16.09
West	6.81	8.89	15.96

Northeast	4.10	5.68	6.07
South	4.20	4.44	6.34
Midwest	3.76	3.31	7.51
West	4.61	3.50	8.38

G. Subject-Matter Clubs

Northeast	18.31	14.57	13.60
South	24.16	23.29	25.73
Midwest	18.74	15.55	19.22
West	16.41	15.48	21.92

Northeast	2.81	3.14	3.07
South	5.95	7.19	6.81
Midwest	4.48	3.18	4.13
West	3.72	3.97	6.80

H. Student Government or Political Clubs

Northeast	13.54	11.85	8.46
South	11.99	11.97	12.52
Midwest	11.02	8.83	9.84
West	10.11	10.49	15.74

Northeast	5.30	5.44	7.11
South	6.81	6.05	7.19
Midwest	5.67	4.85	8.21
West	7.74	6.39	11.56

In varsity athletics, more rural than non-rural students reported participating as leaders or not as leaders in every instance except one: more suburban than rural Northeastern students (25.39 percent to 24.77 percent) said they were participants but not leaders or officers. In the West, more than twice as many rural as urban students reported they took part in varsity athletics as leaders. In the Midwest, almost one-and-a-half times as many rural as urban students gave the same report.

When asked about participation as cheer leader, pep club member, or majorette, rural students responded positively more often than other groups in every instance, including participation as leaders. Rural differences in the South were especially pronounced, with rural student participation as non-leaders exceeding urban participation by 28 percent and suburban participation by 23 percent.

Rural students' reported participation in debating or drama was greater than that of all other students with one exception. When Northeastern students were asked whether they had been leaders or officers in these activities, slightly more suburban students (2.19 percent) than rural students (2.17 percent) replied that they had been.

On the question about band or orchestra, there were only two exceptions to rural dominance. In the South, slightly more urban than rural students reported participation in both categories. In each case, the difference was less than one half of one percentage point.

More rural than other students reported membership in honorary clubs (like national honor societies and Beta Club) in every region. In all regions except the Northeast, more rural than other students said they had participated in at least one of these clubs as a leader or officer.

There were no exceptions to greatest reported rural student participation in school publications -- newspaper, annual, or magazine. Differences between rural and other students were particularly outstanding in the West and Midwest. More than twice as many rural as urban Western students reported participation (not as leaders) in school publications; almost twice as many (46 percent) said they had held leadership positions. In the Midwest, 38 percent more rural than urban students said they had worked on various school publications; but the difference rose to 50 percent in favor of rural students on the item "participation as leader or officer."

Except in the Northeast, more rural than other students reported participating but not as leaders in subject matter clubs, but in only one case (the West) did rural participation exceed that of other groups by more than five percent. With respect to leadership, however, the picture is different. Only in the West did more rural than urban and suburban students have a greater rate, 6.80 percent rural to 3.72 and 3.97 percent urban and suburban.

In seven out of eight comparisons, rural students reported most frequently that they had been involved as participants or leaders in

student government or political clubs. Rural Western participants who were not leaders (15.74 percent) exceeded their urban and suburban counterparts by 5.63 percent and 5.25 percent, respectively. As leaders or officers, the rural group's difference was even more striking: 11.56 percent for rural seniors; 7.74 percent for urban seniors, and 6.39 percent for suburban seniors.

### Summary

In most cases, reported rural student participation in extra-curricular activities exceeded but not by dramatic margins that of other groups. But there were notable exceptions, outside the Northeast. In the South, Midwest, and West, substantially more rural than other seniors said they have been cheerleaders, majorettes, or pep club members. The same regions' rural differences on school publications were more striking, with rural student reported participation in both categories sometimes more than doubling that of other students. In the South and Midwest, considerably greater proportions of rural than other students reported activities in debate or drama. Midwestern rural students said they played in bands or orchestras far more frequently than did urban students and held leadership positions in them more often. Rural Western athletes were far more likely to hold leadership positions on their teams than were their counterparts anywhere else; their rate was double that of urban students in the West. Midwestern athletes' reported rate of leadership in athletics was also substantially higher than that of other groups. Similar but less strong differences appeared in the greater rate of rural participation in student government in the West.

Differences on any one of the items would not alone be significant, but the emergence of a pattern of greater rural participation certainly suggests that a rural student's combined opportunities to belong to a team or club and perhaps gain a leadership role appears to be greater than those of other groups. A school size factor is undoubtedly at work here since so many of the more notable differences are in the West and Midwest, the two regions that still have most of the nation's smaller schools.

### School Climate

Claims often made about rural schools are that, compared with other schools, they have closer student-teacher relationships, better discipline, more integration with the community, and more individualized instruction -- or at least opportunities for the last. An interesting question is whether or not students see their schools in this way.

Items from three questions in the High School and Beyond survey of seniors provided information on various aspects of school climate: individualized instruction, teacher interest in students, effectiveness of discipline, fairness of discipline, school's reputation in the community, and school spirit. Rural students' responses to these items indicate that they sometimes do but about as often do not subscribe to the conventional wisdom about rural schools.

## Teacher and Students

Students were asked to indicate whether they thought the degree of teachers' interest in their students was poor, fair, good or excellent; they could also check a "don't know column." More students in the West (56.22 percent) than any other region checked either "good" or "excellent." Most differences among rural and other students were slight, with rural students in the West checking this response more frequently than their urban counterparts, but with a very slim margin over the suburbs (57.52 percent to 57.36 percent). In the Northeast, more rural than other students also rated teacher interest good or excellent, but with fewer than three points difference at most. In the West and South, suburban students gave teacher interest the highest ratings, but again not by much. In the South, rural student responses were lowest; in the Midwest, urban responses were.

On the other hand, rural students in two regions gave teacher interest in students a poor rating more often than other students. Almost 14 percent and more than 14.5 percent of rural students in the South and Midwest rated this interest "poor," compared with 12.66 percent and 12.1 percent of suburban students in the two regions. In the West, however, only about 9 percent of rural students, compared with 11.73 percent of suburban and 12.23 percent of urban students, rated as "poor" their teachers' interest in students. In the Northeast, more rural (11.55 percent) than urban (10.51 percent) but fewer than suburban (11.83) students gave this response.

Table V-21

1980 Seniors Rating Teacher Interest in Students  
as Poor, Good, or Excellent by Region and Urbanicity

Region	Poor	Good or Excellent
Northeast	11.52	47.77
Urban	10.51	49.77
Suburban	11.83	50.28
Rural	11.55	52.74
South	12.97	50.80
Urban	11.77	51.43
Suburban	12.66	52.87
Rural	13.89	48.32
Midwest	13.21	50.94
Urban	13.30	47.53
Suburban	12.14	52.26
Rural	14.53	50.98
West	11.19	56.22
Urban	12.23	51.44
Suburban	11.73	57.36
Rural	9.05	57.52



## Individualized Instruction

Rural seniors on the whole were least likely of all seniors to say that individualized instruction was used "fairly often" or "frequently" in their classes. On this question, individualized instruction was defined as "small groups or one-to-one with a teacher." Table V-22 shows that, excepting students in the Midwest (where suburban response was lowest), rural students at lower rates than either urban or suburban students replied that individual instruction was used "fairly often" or frequently. They were also least likely to say, however, that it was "never" used -- except in the South, where the highest proportion of students checking "never" were rural.

Table V-22

1980 Seniors Reporting Individualized Instruction  
Fairly Often, Frequently, or Never by Region and Urbanicity

<u>Fairly Often or Frequently</u>				
<u>Region</u>	<u>Urban</u>	<u>Suburban</u>	<u>Rural</u>	<u>All Students</u>
Northeast	23.10	22.10	20.21	21.97
South	28.25	26.79	26.13	26.81
Midwest	29.27	25.97	27.11	26.99
West	25.55	26.87	31.76	27.78
<u>Never</u>				
Northeast	33.61	31.03	31.93	31.73
South	25.40	24.79	28.50	26.36
Midwest	25.39	25.06	24.64	24.97
West	26.96	23.59	24.97	24.59

With these data on high school seniors, the claim that rural students, more than others, perceive teacher-student relationships to be closer certainly cannot be substantiated. Further analyses of these items are needed because the difference seen fairly slight. On the surface, however, it seems clear that region is very much a factor; that in some but not the majority of rural schools this may be true; and that urban and suburban students rate "closeness" factors in their schools about as high, and sometimes higher, than do rural students.

#### School Discipline: Effectiveness and Fairness

Substantial proportions of students throughout the nation responded "poor" when asked to rate the effectiveness of discipline in their schools. In the Northeast, more than 20 percent of rural students, more than 19 percent of suburban students, and just over 16 percent of urban students said their schools did a poor job. In the South as well as the Northeast, more rural students (15.86 percent) than urban (14.65 percent) or suburban students (14.51 percent) gave discipline a poor rating. In the Midwest, more urban students (18.65 percent) responded "poor" than did rural (17.15 percent) or suburban (16.89 percent) students. In the West, fewer proportions of rural than other students said they considered their schools to be poorly disciplined.

Rural students in the West and South said most frequently that their schools were excellent in effecting discipline, but the Southern differences were very small. In the Northeast and Midwest, urban

Table V-23

1980 Seniors Giving Poor and Excellent Ratings to  
Effectiveness of School Discipline by Urbanicity and Region

<u>Urbanicity and Region</u>	<u>Percent</u>	
	<u>Poor</u>	<u>Excellent</u>
Urban		
Northeast	16.03	9.55
South	14.65	9.21
Midwest	18.65	8.53
West	18.55	5.08
Suburban		
Northeast	19.06	6.49
South	14.51	10.32
Midwest	16.89	5.73
West	17.95	5.05
Rural		
Northeast	20.06	7.21
South	15.86	10.73
Midwest	17.15	6.74
West	17.00	8.78

students gave the greatest proportion of "excellent" ratings to the effectiveness of their school's discipline.

More rural than other students in all regions except the Northeast gave their schools "poor" ratings on fairness of discipline. More than 30 percent of Midwestern rural students said that schools were "poor" on this item, and 27.41 percent of rural Northeastern students said the same. Suburban students in the Northeast (28.78 percent) and Midwest (27.70 percent), however, gave similar ratings. Students in urban Western and Southern schools were least likely to rate fairness in discipline as poor: 19.73 percent and 19.91 percent, respectively.

Only in the West did more rural (8.77 percent) than other students (4.78 percent urban; 5.31 percent suburban) give their schools "excellent" ratings on fairness of discipline. In the South, fewer rural than other students thought the fairness of discipline in their schools rated an "excellent" check. In the Midwest, urban students were first in proportions assigning the "excellent" rating, with rural students second and suburban students last. The range was from 3.86 percent in the suburban Midwest to 8.77 percent in the rural West.

Conclusions about differences in discipline among rural and other schools must be held at arms length for several reasons. Students' perceptions of this feature (as well as others) may vary by region and by type of schools. It may be that some types of students are more - or less - critical than others. The data need analysis; and several refined

Table V-24

1980 Seniors Giving Poor and Excellent Ratings to  
Fairness of School Discipline by Urbanicity and Region

<u>Urbanicity and Region</u>	<u>Percent</u>	
	<u>Poor</u>	<u>Excellent</u>
Urban		
Northeast	20.11	6.30
South	19.91	7.53
Midwest	25.56	6.12
West	19.73	4.78
Suburban		
Northeast	28.72	4.48
South	23.80	7.70
Midwest	27.70	3.86
West	19.28	5.31
Rural		
Northeast	27.40	5.28
South	24.93	6.92
Midwest	30.11	4.40
West	20.27	8.77

comparisons should be made. Still, there is no overwhelming evidence here that rural more than other students generally believe they are better and more fairly disciplined than other students. The fact that Western students are in some cases an exception may well reflect the greater numbers of smaller schools in the West, but that hypothesis cannot be proved or disproved at this time.

### School Spirit and School's Reputation in the Community

Southern students claimed the greatest school spirit in the nation: almost 65 percent rated it either good or excellent. In the West, 58.6 percent of students gave one of these ratings. Rural students in all regions except the Northeast gave fewest good or excellent ratings, but except in the Northeast differences were about 5 points or less. In the Northeast the rural-urban difference was 8.34 points, with rural high. Of those students who rated school spirit poor, rural students were represented in greatest proportions in all regions, but with relatively small differences. In no case did many as 20 percent of students give school spirit a "poor" rating; the range was from 12.21 percent in the urban South to 19.66 percent in the rural West.

Rural students in all regions were the least likely group to say their schools enjoyed an excellent reputation in the community; suburban students in all regions were the most likely. Rural-suburban differences on this item were more than 7 percent in the Northeast, more than 4 percent in the South, almost 9 percent in the Midwest, and more than 8 percent in the West.

Table V-25

1980 Seniors Rating School Spirit, Poor, Good or  
Excellent by Region and Urbanicity

Region	Poor	Good or Excellent
Northeast	19.39	51.89
Urban	19.21	47.15
Suburban	19.34	51.73
Rural	19.66	55.99
South	12.98	64.90
Urban	12.21	68.09
Suburban	12.74	65.03
Rural	13.61	63.18
Midwest	16.26	36.76
Urban	15.84	57.89
Suburban	15.45	58.62
Rural	17.49	53.98
West	15.52	58.60
Urban	14.54	59.04
Suburban	15.29	59.04
Rural	16.12	57.18

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On the other hand, in only one case (the South) did a greater proportion of rural than other students indicate they thought their schools' reputation was poor. In the Northeast, Midwest, and West, more than than other students gave a "poor" rating; in the Midwest and West, fewest rural students so rated their schools' reputation in the community.

't K:

1.16

1.93

1.14

3.59

3.10

1.50

1.78

3.73

1.03

1.28

1.47

1.59

1.09

3.26

1.99

1.30



## Summary

The conventional wisdom about closer relations and greater school spirit in rural and small schools was not supported by the responses of high school seniors in 1980. In particular, rural students were least likely of all students to report receiving much individualized attention and most likely to rate effectiveness of discipline as "poor." Rural students were generally less likely than other students to give highest marks to "school spirit" and "schools reputation in the community," although the differences were often so slight as possibly to be meaningless. But in no cases were total rural responses on items indicating school climate overwhelmingly more positive than those of other students. Small school differences in the rural West and Midwest may well have been reflected, however, in the exception on some items, where rural responses were more positive than either urban or suburban ones.

On the other hand, certain regional differences did stand out. For example, southern students of all types gave substantially the highest ratings to school spirit, and Northeastern students of all types were more critical than students in other regions about of the amount of individualized instruction they received, school spirit, and the school's reputation in the community.

## VI. SUMMARY AND CONCLUSIONS

This study has focused primarily on numbers -- numbers of rural people, schools and districts, students, and student responses to questions about their schooling experiences. The effort was not intended to be a policy analysis, but it would be incomplete without some indication of what the numbers might imply. The data used here seem to suggest a need for educators and policy makers to consider three elements of education as it occurs in the nation's rural schools: equity, curriculum, and planning around regional differences within a national context.

Equity. The nation has long had a commitment to strive for equitable treatment of the students who pass through its public schools. Generally, a distinction is made between equitable "inputs" and equitable "outcomes." In this study, no attempt was made to examine most "inputs," which are the resources -- money, teachers, and facilities -- available for the education of students. A great deal of attention, however, has been given to the question of outcomes: the educational level of rural people generally, the achievement of rural students at elementary and high school levels, and the percentage of rural, as compared to urban and suburban students, reporting participation in a wide range of curricular and other activities.

In the main, rural people are educationally disadvantaged, with fewer years of formal education and higher rates of functional illiteracy than

other groups. Rural minorities, in particular, are disadvantaged on these measures, even when compared to urban minorities and to rural Anglos. Rural students in the South, Midwest and West are not, in proportion to their numbers, represented equitably in those academic classes leading to admission to superior colleges and universities, or in those technical/vocational programs currently thought to provide the best hedges against unemployment for students not planning to attend college.

The greatest differences on several items, however, were among regions; and those differences reflect long-standing conditions that have resulted from historical patterns of settlement, development, and migration. In achievement and participation in advanced offerings, Northeastern students as a whole were the most educationally advantaged group in the nation, followed (and occasionally exceeded by) Midwestern students. Students in the South had the lowest levels of attainment and achievement and usually the lowest participation in advanced course offerings, although there were notable exceptions among Southern urban and suburban students. Compared with their Northeastern counterparts, Southern rural students had notable lags on most indications of educational success. In part, this condition reflects both higher rates of poverty in the South and the presence of large numbers of rural minorities, who have not benefitted as much as other groups from the nation's educational offerings. It may well reflect, as well, the South's generally lower-than-average spending on public education.

Small and isolated schools in the West and Midwest, on the other hand, seem disadvantaged because of size and isolation from other centers; rural students in the West usually had lower rates of participation in advanced academics offerings than did either rural students in the Northeast and Midwest or their urban and suburban counterparts.

The rural students with most unmet needs, therefore, seem to live in the South, the West, and isolated portions of Great Plains states. The reasons for inequity are, like the regions themselves, different. To achieve greater equity in the South, more attention to poverty and lingering effects of racial discrimination seem appropriate. To achieve the same in sparsely-settled Western and Plains states, sensitive recognition of the difficulties imposed by small size and vast distances would seem appropriate.

Curriculum. In April of 1983, the National Commission on Excellence reported on trends in student enrollment in academic and "personal development" courses. The Commission, noting that enrollment has declined in the former and increased in the latter, speculated that the trend bodes ill both for young peoples' career opportunities and for the nation's ability to compete with other developed nations that emphasize academic course work. In particular, some members of the Commission offered the view that the best bet for individual economic viability is a liberal education; the current technological era requires the skills of analysis and reflection that are best taught by liberal disciplines and

by advanced math and science. Many vocational programs, the Commission noted, are not appropriate for high-school students, who must anticipate a number of career changes during their working years.

If this is the case -- and even if the case might be argued to some degree -- there is cause for concern that fewer rural than other students in 1980 reported taking advanced classes, and more rated their academic instruction as poorer than either urban or suburban students. Almost across the board, rural students had lower participation than urban and suburban students in foreign languages, math, science, and honors classes. Given the Commission on Excellence Report on general decline in academic program enrollment and the National Assessment of Educational Progress report on declining higher-order abilities among secondary students, the relatively lower standing of rural students deserves some attention. Are rural students taking fewer academic classes than other students because they are different, or because the courses are not as available? If they are not available, and if it is agreed that they ought to be, are there relatively cost-effective ways to reduce the deficiencies? If there is a national stake in appropriate human development, national attention to such inequities in the curriculum as might exist seems warranted. A beginning might be a more extensive study to examine educational opportunities available to rural, as compared to urban and suburban students.

Planning. Like other local government agencies, school systems in rural and small places will be increasingly hard-pressed to operate without capacity-building ability. Although regional differences among

In relation to this local and regional need, there is a need for a national effort to provide rural planners with the data they need to make good decisions. Specifically, there is a need for a national study of the "inputs" of rural schooling. Financial resources, teachers and physical facilities need to be closely examined in a study with the design sophistication to analyze rural, urban, and suburban cost differences, staffing differences, and needs.